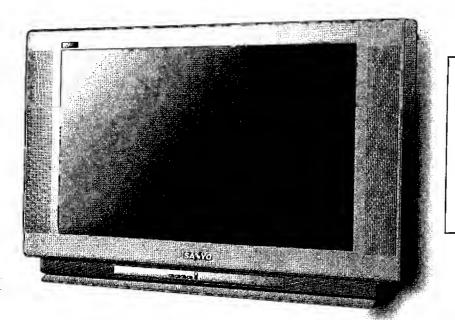


FILE NO.

## **SERVICE MANUAL**

# Remote Control Digital Color Television

## HT30744 (U.S.A.) (CANADA) ORIGINAL VERSION



Chassis No. 30744-00

NOTE: Match the Chassis No. on the unit's back cover with the Chassis No. in the Service Manual.

> If the Original Version Service Manual Chassis No. does not match the unit's, additional Service Literature is required. You must refer to "Notices" to the Original Service Manual prior to servicing the unit.

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## **Specifications**

| Specifications                                    |
|---|
| Power Rating 120V, 60Hz                           |
| 140W (Avg), 2.5A (Max)                            |
| Antenna Input Impedance 75Ω                       |
| UHF/VHF/CATV                                      |
| Digital   |
| Receiving Channel 2 - 13 (VHF),                   |
| 14 - 69 (UHF),                                    |
| 01, 14-94, 95-125 (CATV)                          |
| 1 - 99 (Digital)                                  |
| Remote Ready 52 Key Remote Control                |
| Sound Output 5.0 W/CH                             |
| Intermediate Frequency                            |
| Picture IF Carrier 45.75MHz                       |
| Sound IF Carrier 41.25MHz                         |
| Color Sub Carrier 42.17MHz                        |
| Picture Tube W76QEN693X100                        |
| Semiconductors                                    |
| Integrated Circuits40                             |
| Transistors                                       |
| Except within Tuner, RC Pre-Amp. & Digital Module |
| Cabinet Dimensions                                |
| Width908 mm                                       |
| Height  |
| Depth553 mm                                       |
|   |

REFERENCE No. SM780094

HT30744, H3GLM, PRODUCT CODE 111370290

# SAFETY INSTRUCTIONS

#### SAFETY PRECAUTIONS

WARNING: The chassis of this receiver has a floating ground with the potential of one half the AC line voltage in respect to earth ground. Service should not be attempted by anyone not familiar with the precautions necessary when working on this type of equipment.

The following precautions must be observed:

- An isolation transformer must be connected in the power line between the receiver and the AC line before any service is performed on the receiver.
- 2. Comply with all caution and safety-related notes provided on the side of the cabinet, inside the cabinet, on the chassis, and the picture tube.
- When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly, such as control knobs, adjustment covers, shields and barriers.

DO NOT OPERATE THIS TELEVISION RECEIVER WITHOUT THE PROTECTIVE SHIELD IN POSITION AND PROPERLY SECURED.

4. Before replacing the back cover of the set, thoroughly inspect the inside of the cabinet to see that no stray parts or tools have been left inside.

Before returning any television to the customer, the service technician must perform the following safety checks to be sure that the unit is completely safe to operate without danger of electrical shock.

## **ANTENNA COLD CHECK**

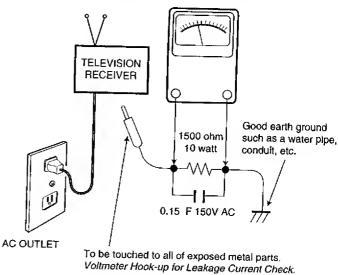
Remove AC plug from the 120 VAC outlet and place a jumper across the two blades. Connect one lead of an ohmmeter to the jumpered AC plug, and touch the other lead to each exposed antenna terminal (UHF and VHF antenna terminals). The resistance must measure between 1M ohm and 5.2M ohm. Any resistance value below or above this range indicates an abnormality which requires corrective action.

## **LEAKAGE CURRENT CHECK**

Plug the AC line cord directly into a 120 VAC outlet. (Do not use an isolation transformer for this check.) Use an AC voltmeter, that has 5000 ohms per volt or more sensitivity. Connect a 1500 ohm 10 watt resistor, paralleled by a 0.15 µF 150 VAC capacitor, between a known good earth ground (water pipe, conduit, etc.) and all exposed metal parts of the cabinet (antennas, handle bracket, metal cabinet, screw heads, metal overlays, control shafts, etc.). Measure the AC voltage across the 1500 ohm resistor. The AC voltage should not exceed 750 mV. A reading exceeding 750 mV indicates that a dangerous potential exists. The fault must be located and corrected. Repeat the above test with the receiver power plug reversed.

NEVER RETURN A RECEIVER TO THE CUSTOMER WITHOUT TAKING THE NECESSARY CORRECTIVE ACTION.

READING SHOULD NOT EXCEED 750 mV. AC VOLTMETER (5000 ohms per volt or more sensitivity)



## X-RADIATION PRECAUTION

The primary source of X-RADIATION in solid-state receivers is the picture tube. The picture tube is specially constructed to limit X-Ray emission. For continued X-RADIATION protection, the replacement tube must be the same type as the original (including the suffix letter in the part numbers). Excessive high voltage may produce potentially hazardous X-RADIATION. To avoid such hazards, the high voltage must be maintained within specific limits. Refer to the X-RADIATION WARNING NOTE on the CHASSIS SCHEMATIC in this service manual for specific high voltage limits. If the high voltage exceeds specified limits, check the components specified on the chassis schematic diagram and take the necessary corrective action. Carefully follow the instructions for the +B Voltage Check and the High Voltage Check to maintain the high voltage within the specified limits.

## HIGH VOLTAGE HOLD-DOWN TEST

To prevent X-RADIATION from the picture tube due to excessive high voltage, a HOLD-DOWN circuit is provided in the high voltage circuit. Every time the receiver is serviced, the high voltage HOLD-DOWN circuit must be tested for proper operation. Refer to the HIGH VOLTAGE HOLD-DOWN TEST in service adjustments.

## **PRODUCT SAFETY NOTICE**

When replacing components in a receiver, always keep in mind the necessary product safety precautions. Pay special attention to the replacement of components marked with a star  $(\star)$  in the parts list and in the schematic diagrams. To ensure safe product operation, it is necessary to replace those components with the exact same PARTS.

## **SERVICE ADJUSTMENTS**

#### **GENERAL**

This set has an On-screen Service Menu system included in the CPU that allows remote operation for most of the service adjustments.

## **ON-SCREEN SERVICE MENU SYSTEM**

- 1. Enter the Service Menu:
  - While pressing the -VOLUME key on the front control panel, reconnect the AC power cord. The Service Menu Display will now appear. The remote can now be used to make adjustments.
     See Figure 1.

#### 2. Service Adjustments:

- Press the Channel ▲ or ▼ key to select the desired service menu you want to adjust. See page 5 for On-screen Service Menu.
- Use the Volume + or key or numeric keys to adjust the data.
   (For Sub Address see below)



• Press the MENU key to turn off the Service Menu display.

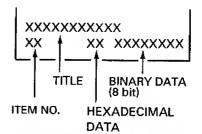


Figure 1. Service Menu Display

## ADJUSTMENT FOR SUB ITEM (ADDRESS)

Some service data have Sub - Addresses. Use the numeric keys (from 0 to 7), to adjust the Sub - item data.

#### ADJUST DATA OF SUB-TITLE

1. Find the title and its bit of binary data from Table 1 (On-Screen Service Menu).

(b7) (b6) (b5) (b4) (b3) (b2) (b1) (b0)

O 1 O 1 O 1 1 O

BINARY DATA (8 bit)

- 2. Enter the service menu (see above) and select the item number needed with the Channel ▲ or ▼ key.
- 3. With the numeric key (from 0 to 7), change the bit data. Each time the numeric key is pressed, the data changes from 0 to 1 alternately. For example, to change the data of bit 5, press the "5" key.

NOTE: The ▲ and ▼ symbols used in the following service adjustments refer to the Channel up and down keys not the Menu keys.

#### IC802 (EEPROM) REPLACEMENT

When IC802 (EEPROM) is replaced, IC801 (CPU) will automatically write the initial reference data into IC802 for basic TV operation. However, the bus data should be checked and some bus data should be set up before attempting the service adjustments. (See Table 1. on pages 5 – 11 for detailed bus data information.)

#### INITIAL BUS DATA SETUP

Note: When IC802 (EEPROM) is replaced, change the following initial reference data for proper TV operation before attempting service adjustments.

- 1. Disconnect the AC power cord (AC 120V line).
- 2. While pressing the MENU key, reconnect the AC power cord. The Service Menu display will now appear.
- 3. Select NO. 102 SHU2PO (Sub Hue / Pre/Over Shoot) with ▲ or ▼ key. Adjust the data with number keys for 1F.
- 4. Select NO. 103 SLC2CTI (Sub Color / CTI Level) with ▲ or ▼ key. Adjust the data with number keys for 21.
- 5. Select NO. 105 SSH2LTI (Sub Sharp / LTI Level) with ▲ or ▼ key. Adjust the data with number keys for 89.
- 6. Select NO. 106 RD2PTL (R Drive / P Limit Level) with ▲ or ▼ key. Adjust the data with number keys for 70.
- 7. Select NO. 108 BD2CTIM1 (B Drive / CTI Mode) with ▲ or ▼ key. Adjust the data with number keys for 78.
- 8. Select NO. 109 SBR2GAM (Sub Bright / Gamma) with ▲ or ▼ key. Adjust the data with number keys for 2A.
- 9. Select NO. 10A RCT2LTIM1 (R Cutoff / LTI Mode) with ▲ or ▼ key. Adjust the data with number keys for 88.
- 9. Select NO. 10B GCT2DPL (G Cutoff / DPIC Level) with ▲ or ▼ key. Adjust the data with number keys for 5D.
- Select NO. 10C BCT2DCT (B Cutoff / DC Transit) with ▲ or ▼ key. Adjust the data with number keys for 75.
- 11. Select NO. 10F CBOF2AW1AB (CB Offset / Aging W / Aging B) with ▲ or ▼ key. Adjust the data with number keys for 94.
- 12. Select NO. 110 CROF2SYS (CR Offset / System ) with ▲ or ▼ key. Adjust the data with number keys for B8.
- 13. Select NO. 114 VML4FLC2FLS (VM Level / FLCOL / FLCOL Switch) with ▲ or ▼ key. Adjust the data with number keys for F2.
- 14. Select NO. 116 VS (V Size ) with ▲ or ▼ key. Adjust the data with number keys for 86.

## **INITIAL BUS DATA SETUP (Cont.)**

- 15. Select NO. 117 VPS (V Position) with ▲ or ▼ key. Adjust the data with number keys for 74.
- 16. Select NO. 118 VLI4SCR (V Lin / s Correction) with ▲ or ▼ key. Adjust the data with number keys for 63.
- 17 Select NO. 119 HSI2UUC (H Size / Up UCP) with ▲ or ▼ key. Adjust the data with number keys for 84.
- 18. Select NO. 11A PAP2LUP (Pin Amp / Lo UCP) with ▲ or ▼ key. Adjust the data with number keys for 6C
- 19. Select NO. 11B UCP 2UUG (Up CPin / Up UCG) with ▲ or ▼ key. Adjust the data with number keys for 80.
- 20. Select NO. 11C LCP2LUG (Up CPin / Lo UCG) with ▲ or ▼ key. Adjust the data with number keys 78.
- 21. Select NO. 11D PPH2UPO1VBS (Pin Phase / Uc Pol / V Blk Sw) with ▲ or ▼ key. Adjust the data with number keys 6D.
- 22. Select NO. 11E HPO2CSH1NIN (H Position / CLP Shift / Non Inter) with ▲ or ▼ key. Adjust the data with number keys for 79.
- 23. Select NO. 11F ABO2RAM (AFC Bow / RF AFC Mode) with ▲ or ▼ key. Adjust the data with number keys for 7D.
- 24. Select NO. 120 AAN2AGS1 (AFC Angle / AGC Sw) with ▲ or ▼ key. Adjust the data with number keys for 88.
- 25. Select NO. 121 LBK2CPH (Left Blk / CLP Phase) with ▲ or ▼ key. Adjust the data with number keys for BC.
- 26. Select NO. 122 RBK2CGA1HSW (R Blk / CLP Gate / H Blk Sw) with ▲ or ▼ key. Adjust the data with number keys for 9D.
- 27. Select NO. 126 VCP4HCP (V Comp / H Comp) with ▲ or ▼ key. Adjust the data with number keys for 89.
- 28. Select NO. 136 RF-HUE (RF Tint) with ▲ or ▼ key. Adjust the data with number keys for 00.
- 29. Select NO. 137 RF-COL (RF Color) with ▲ or ▼ key. Adjust the data with number keys for 00.
- 30. Select NO. 157 RF-SHP (RF Sharpness) with ▲ or ▼ key. Adjust the data with number keys for FE.
- 31. Select NO. 158 41-SHP (480) Sharpness) with ▲ or ▼ key. Adjust the data with number keys for FE.
- 32. Select NO. 159 4P-SHP (480P Sharpness) with ▲ or ▼ key. Adjust the data with number keys for FE.
- 33. Select NO. 15A 1I-SHP (1080I Sharpness) with ▲ or ▼ key. Adjust the data with number keys for FE.
- 34. Select NO. 15B 7P-SHP (720P Sharpness) with ▲ or ▼ key. Adjust the data with number keys for FE.
- 35. Select NO. 15C DIGITAL-SHP (Digital Sharpness) with ▲ or ▼ key. Adjust the data with number keys for FE.
- 36. Select NO. 15E RF-LLV (Rf LTI Level) with ▲ or ▼ key. Adjust the data with number keys for 01.
- 37. Select No. 171 RF-CB (RF CB Offset) with ▲ or ▼ key. Adjust the data with number keys for 01.
- 38. Select No. 172 4I-CB (480I CB Offset) with ▲ or ▼ key. Adjust the data with number keys for 01.
- 39. Select No. 173 4P-CB (480P CB Offset) with ▲ or ▼ key. Adjust the data with number keys for FF.
- 40. Select No. 174 1I-CB (1080I CB Offset) with ▲ or ▼ key. Adjust the data with number keys for FE.
- 41. Select No. 175 7P-CB (720P CB Offset) with ▲ or ▼ key. Adjust the data with number keys for FF.
- 42. Select No. 176 D-CB (Digital CB Offset) with ▲ or ▼ key. Adjust the data with number keys for F8.
- 43. Select No. 178 RF-CR (RF CR Offset) with ▲ or ▼ key. Adjust the data with number keys for FF.
- 44. Select No. 179 4I-CR (480I CR Offset) with ▲ or ▼ key. Adjust the data with number keys for F8.
- 45. Select No. 17A 4P-CR (480P CR Offset) with ▲ or ▼ key. Adjust the data with number keys for F9.
- 46. Select No. 17B 1I-CR (1080I CR Offset) with ▲ or ▼ key. Adjust the data with number keys for F6.
- 47. Select No. 17C 7P-CR (720P CR Offset) with ▲ or ▼ key. Adjust the data with number keys for F6.
- 48. Select No. 17D D-CR (Digital CR Offset) with ▲ or ▼ key. Adjust the data with number keys for F6.
- 49. Select No. 184 D-SYS (Digital System) with ▲ or ▼ key. Adjust the data with number keys for 01.
- 50. Select No. 1D3 CWUBK (Video 1/2 Letter Box Lo Blk) with ▲ or ▼ key. Adjust the data with number keys for 08.
- 51. Select No. 1D4 CWLBK (Video 1/2 Letter Box Up Blk) with ▲ or ▼ key. Adjust the data with number keys for 0B.
- 52. Select No. 1FA 4PWLBK (480P letter Box Lo Blk) with ▲ or ▼ key. Adjust the data with number keys for 0B.
- 53. Select No. 20C 7PWUBK (720P Letter Box Up Blk) with ▲ or ▼ key. Adjust the data with number keys for 08.
- 54. Select No. 20D 7PWLBK (720P letter Box Lo Blk) with ▲ or ▼ key. Adjust the data with number keys for 0B.
- 55. Select No. 21F 1IWUBK (1080I-Letter Box Up Blk) with ▲ or ▼ key. Adjust the data with number keys for 08.
- 56. Select No. 220 1IWLBK (1080I-Letter Box Lo Blk) with ▲ or ▼ key. Adjust the data with number keys for 0B.
- 57. Select No. 22B DVPS (Digital Full V Position) with ▲ or ▼ key. Adjust the data with number keys for 01.
- 58. Select No. 258 PUBK (PAP-On Up Blk) with ▲ or ▼ key. Adjust the data with number keys for 08.
- 59. Select No. 259 PLBK (PAP-On Lo Blk) with ▲ or ▼ key. Adjust the data with number keys for 0B.
- 60. Select No. 26B DWUBK (Digital Letter Box Up Blk) with ▲ or ▼ key. Adjust the data with number keys for 08.
- 61. Select No. 26C DWLBK (Digital Letter Box Lo Blk) with ▲ or ▼ key. Adjust the data with number keys for 0B.
- 62. Select No. 043 SHU4SCL (Sub Hue / Sub Color) with ▲ or ▼ key. Adjust the data with number keys for 72.
- 63. Select No. 045 YD3SF2F01CM2 (Y Drive / SHP-F0 / FSC Out / CD Mode) with ▲ or ▼ key. Adjust the data with number keys for 32.
- 64. Select No. 053 HP2V11V2 (HP / V1/ V2) with ▲ or ▼ key. Adjust the data with number keys for 7B.
- 65. Select No. 088 OP2 (Option 2) with ▲ or ▼ key. Adjust the data with number keys for 12.
- 66. Select No. 08C AKB (AKB Detect Time) with ▲ or ▼ key. Adjust the data with number keys for 10.
- 67. Press the MENU key to turn off the Service Menu display.

## **Table 1. ON-SCREEN SERVICE MENU**

When IC802 (EEPROM) is replaced, check the bus data to confirm they are the same as below. The shaded menu should be checked and be set up or readjusted according to the procedures described in the following pages. Initial Setup Data marked with an \* should be changed from Initial Reference Data. (See pages 3 and 4 for Initial Bus Data Setup.)

| No.                | TITLE                  | INITIAL REFERENCE<br>DATA HEX | INITIAL SETUP<br>DATA HEX | INITIAL SETUP<br>DATA BINARY | FUNCTION  |  |
|--------------------|------------------------|-------------------------------|---------------------------|------------------------------|---|--|
| 100                | PRGBON4DL2ES1SF        | FD                            | FD                        | 11111101                     | PIC+R+G+B On(7~4), D COL(3~2), ES1(1):0(fixed), SF(0) |  |
| 101                | BLKBTM                 | 00                            | 00                        | 00000000                     | BLK_BTM(1~0)  |  |
| 102                | , SHUZPO               | 23                            | 1144                      | 00013191                     | SUB HUEIZ-22; PRE/OVERUI - 0)                         |  |
| 103                | SCL2CTI                | 3D                            | 121*                      | 00100001                     | SUB COLORIZ-2): CTI_LEV(I-6)                          |  |
| 104                | Ţ                      | 1                             | <b>V</b>                  | Ţ                            | NOT USED  |  |
| 105                | SSH2LTI                | 81                            | 69*                       | 10001001                     | SUB SHARPNESSITE 2): LTT LEVIT-0)                     |  |
| 106                | RD2PTL                 | -L 70                         | ill 7 - 70                | 01110000                     | A DRIVEY-2, PLINIT LEVIL-DI                           |  |
| 107                | GD2ABLM                | 7#                            |                           | district :                   | "G_DRIVETT-YHABL MODELL-O"                            |  |
| 108                | BD2CTIM1               | , 7C                          | 70*                       | -01/11/000                   | B_ORIVEI7#21 CTL MODE(1)                              |  |
| 109                | S8R2GAM                | Presidential                  | 2A*                       | 60101010                     | SUB_BRIGHT(7-2) GAMMA(1-0)                            |  |
| 10A                | ACT2LTIM1              | of the track of the           | 88*                       | 10001800                     | A_CUTOFF(7-2), LT(_MODERL)                            |  |
| 108                | GCT2DPL                | <b>75</b>                     | <sup>[t]</sup>            | 01011701                     | GLCUTOFPO-ZH DPIC_LEV(120)                            |  |
| 10C                | BCT2DCT                | 用用 11 <b>75</b> 112 11 2      | 14 (1 <b>75*</b> (1       | 1101110101                   | B_CUTOFF(7-2), DC_TRAN(1-0)                           |  |
| 10D                | SCO4LR2L               | 57                            | 57                        | 01010111                     | SUB CONT(7-4) LAGB2 LEV(3-0)                          |  |
| 10E                | PABL4ABLT              | F1                            | F1                        | 11110001                     | P_ABL(7~4), ABL_TH(3~0)                               |  |
| 10F                | CB0F2AW1AB             | 90                            | 94*                       | 10010100                     | CB_OFFSET(7~2), AGING_W(1), AGING_B(0)                |  |
| 110                | CROF2SYS               | 80                            | B8*                       | 10111000                     | CR_OFFSET(7~2), SYSTEM(1~0)                           |  |
| 111                | YOF4VD2VF              | 02                            | 02                        | 00000010                     | Y_OFFSET(7~4), VM_DLY(3~2), VM_FO(1~0)                |  |
| 112                | RYR4RYB                | 88                            | 88                        | 10001000                     | R-Y/R(7~4), R-Y/B(3~0)                                |  |
| 113                | GYR4GYP                | 88                            | 88                        | 10001000                     | G-Y/R(7~4),G-Y/B(3~0)                                 |  |
| 114                | VML4FLC2FLS            | F8                            | F2*                       | 11110010                     | VM_LEV(7~4), FLCOL(3~2), FLCOL SW(1)                  |  |
| 115                | UBK4LBK                | 00                            | 00                        | 00000000                     | UP_BLK(7~4), LO_BLK(3~0)                              |  |
| 116                | vs vs                  | BE HOW                        | 86*                       | 10000110                     | VESIZE(7/2): biti-1 tiji0 0 its /oc. rixed)           |  |
| 117                | VPS                    | 78                            | 741                       | -01110100                    | V POSITION(LZ)  |  |
| 118                | VLI4SCR                | 76                            | 63*                       | 01100011                     | V_LIN(7~4), S_CORRECTION(3~0)                         |  |
| 119                | HSI2UUC                | 61                            | 84*                       | 10000100                     | H. SIZEI/ESTEUS LICPITARISES FOR                      |  |
| 11A.               | PAP2LUP                | 4 85                          | 6C*                       | 0.151100                     | PRAMPE STOCKERS                                       |  |
| 11 <u>8</u><br>110 | UCP2UUG                | , BD                          | 80*                       |                              | JPR CENTAZYOUR VICENSON                               |  |
| 110                | LCP2LUG<br>PPH2UPO1VBS | 99                            | 78*                       | 01)11060                     | CO. CPINIT SI TO UCGINO                               |  |
| tie                | HPD2C9H1NIN            | 83<br>9C                      | \$ 6D*   3                | e1101101 <sub>=</sub>        | PINERHASE DAY LO FOUTH VELKSAMIG                      |  |
| 115                | ABOZRAM                | 9C<br>85                      | 79*                       | g10 1901                     | H. POBLICONTAR DEBESHIFT (B) (I) CHINETER (D)         |  |
| 120                | AAN2AGS1               | 84                            | *                         |                              | AFC BOVEAU REAFCEMODECTOR                             |  |
| 121                | LBK2CPH                | EO E                          | <b>38</b> *               | 100010001                    | And Angled Epage Swin                                 |  |
| 122                | RBK2CGA1HSW            | 71                            | BC*                       | 10111100                     | LEFT_BLK(7-2), CLP_PHASE(1-0)                         |  |
| 123                | VAS2JSW                | 00                            | 9D*                       | 10011101                     | RIGHT_BLK(7-2), CLP_GATE(1), HBLK_SW(0)               |  |
| 124                | VSR                    | 7D                            | 7D                        | 00000000                     | V_ASPECT(7-2), JMP_SW (0)                             |  |
| 125                | UVL4LVL                | 00                            |                           | 01111101                     | V_SCROLL(7-2), b1 : 0, b0 : 1 (b1 / b0: fixed)        |  |
| 126                | VCP4HCP                | 49                            | 00<br>89*                 | 00000000                     | UP_VLIN(7-4), LO_VLIN(3-0)                            |  |
| 127                | ATI3HVS2BOF1AOF        | 70                            | 70                        | 10001001                     | V_COMP(7-4), H_COMP(3-0)                              |  |
| 128                | 128                    | 00                            | 00                        | 01110000                     | AKB-TIM(7-3), HVBTM_SW(2),BLK OFF(1), AKB OFF(0)      |  |
| 129                | RF-SF0                 | 01                            | 01                        | 00000000                     | PRELIMINARY   |  |
| 12A                | 4I-SF0                 | 01                            | 01                        | 00000001                     | RF SHP_F0(0)  |  |
| 12B                | 4P-SF0                 | 01                            | 01                        | 00000001                     | 4801 SHP_F0(0)  |  |
| 12C                | 1I-SF0                 | 01                            | 01                        | 00000001                     | 480P SHP_F0(0)  |  |
| 12D                | 7P-SF0                 | 01                            | 01                        | 00000001                     | 1080I SHP_F0(0)                                       |  |
| 12E                | D-SF0                  | 01                            | 01                        | 00000001                     | 720P SHP_F0(0)  |  |
| 12F                | RF-CON                 | 00                            | 00                        | 00000001                     | DIGITAL SHP_F0(0)                                     |  |
| 130                | 4I-CON                 | 00                            | 00                        | 00000000                     | RF CONTRAST   |  |
| 131                | 4P-CON                 | 00                            | 00                        |                              | 4801 CONTRAST   |  |
|                    |                        |                               | - 00                      | 0000000                      | 480P CONTRAST   |  |

Table 1. ON-SCREEN SERVICE MENU (Continued)

| No. | TITLE       | INITIAL REFERENCE<br>DATA HEX | INITIAL SETUP<br>DATA HEX | INITIAL SETUP | FUNCTION                              |
|-----|-------------|-------------------------------|---------------------------|---------------|---------------------------------------|
| 132 | 1I-CON      | 00                            | 00                        | 00000000      |                                       |
| 133 | 7P-CON      | 00                            | 00                        | 00000000      | 1125I CONTRAST                        |
| 134 | D-CON       | 00                            | 00                        | 00000000      | 720P CONTRACT                         |
| 135 | W-CON       | 00                            | 00                        | 00000000      | DIGITAL CONTRAST  LETTER BOX CONTRAST |
| 136 | RF-HUE      | FC                            | 00*                       | 00000000      | RF TINT                               |
| 137 | 4I-HUE      | 00                            | 00                        | 00000000      | 480I TINT                             |
| 138 | 4P-HUE      | 00                            | 00                        | 00000000      | 480P TINT                             |
| 139 | 1I-HUE      | 00                            | 00                        | 00000000      | 1080I TINT                            |
| 13A | 7P-HUE      | 00                            | 00                        | 00000000      | 720P TINT                             |
| 13B | D-HUE       | 00                            | 00                        | 00000000      | DIGITAL TINT                          |
| 13C | W-HUE       | FF                            | FF                        | 1111111       | LETTER BOX TINT                       |
| 13D | RF-PRE      | 02                            | 02                        | 00000010      |                                       |
| 13Ë | 4I-PRE      | 03                            | 03                        | 00000011      | RF PRE/OVER(1-0) 4801 PRE/OVER(1-0)   |
| 13F | 4P-PRE      | 03                            | 03                        | 00000011      | 480P PRE/OVER(1-0)                    |
| 140 | 1I-PRE      | 03                            | 03                        | 00000011      | 1080I PRE/OVER(1-0)                   |
| 141 | 7P-PRE      | 03                            | 03                        | 00000011      | 720P PRE/OVER(1-0)                    |
| 142 | D-PRE       | 03                            | 03                        | 00000011      | DIGITAL PRE/OVER(1-0)                 |
| 143 | RF-COL      | 01                            | 00*                       | 00000000      | RF COLOR                              |
| 144 | 4I-COL      | 04                            | 04                        | 0000000       | 4801 COLOR                            |
| 145 | 4P-COL      | 05                            | 05                        | 00000100      | 480P COLOR                            |
| 146 | 1I-COL      | 04                            | 04                        | 00000100      | 1080I COLOR                           |
| 147 | 7P-COL      | 04                            | 04                        | 00000100      | 720P COLOR                            |
| 148 | D-COL       | 00                            | 00                        | 00000000      | DIGITAL COLOR                         |
| 149 | W-COL       | 00                            | 00                        | 0000000       | LETTER BOX COLOR                      |
| 14A | RF-CLV      | 01                            | 01                        | 0000001       | RF CTI_LEV(1-0)                       |
| 14B | 4I-CLV      | 01                            | 01                        | 00000001      | 4801 CTI_LEV(1-0)                     |
| 14C | 4P-CLV      | 01                            | 01                        | 00000001      | 480P CTI_LEV(1-0)                     |
| 14D | 1I-CLV      | 01                            | 01                        | 00000001      | 1080I CTI_LEV(1-0)                    |
| 14E | 7P-CLV      | 01                            | 01                        | 00000001      | 720P CTI_LEV(1-0)                     |
| 14F | D-CLV       | 01                            | 01                        | 00000001      | DIGITAL CTI_LEV(1-0)                  |
| 150 | RF-BRI      | 00                            | 00                        | 00000000      | RF BRIGHT                             |
| 151 | 4l-BRI      | 00                            | 00                        | 00000000      | 480I BRIGHT                           |
| 152 | 4P-BRI      | 00                            | 00                        | 00000000      | 480P BRIGHT                           |
| 153 | 1I-BRI      | 00                            | 00                        | 00000000      | 1080I BRIGHT                          |
| 154 | 7P-BRI      | 00                            | 00                        | 00000000      | 720P BRIGHT                           |
| 155 | D-BRI       | 00                            | 00                        | 00000000      | DIGITAL BRIGHT                        |
| 156 | W-BRI       | 00                            | 00                        | 00000000      | LETTER BOX BRIGHT                     |
| 157 | RF-SHP      | 00                            | FE*                       | 17111110      | RF SHARPNESS                          |
| 158 | 4I-SHP      | 00                            | FE*                       | 11111110      | 4801 SHARPNESS                        |
| 159 | 4P-SHP      | 00                            | FE*                       | 11111110      | 480P SHARPNESS                        |
| 15A | 1I-SHP      | 00                            | FE*                       | 11111110      | 1080I SHARPNESS                       |
| 15B | 7P-SHP      | 00                            | FE*                       | 11111110      | 720P SHARPNESS                        |
| 15C | DIGITAL-SHP | 00                            | FE*                       | 00000000      | DIGITAL SHARPNESS                     |
| 15D | W-SHP       | 00                            | 00                        | 00000000      | LETTER BOX SHARPNESS                  |
| 15E | RF-LLV      | 00                            | 01*                       | 00000001      | RF LTI_LEV(1-0)                       |
| 15F | 4i-LLV      | 01                            | 01                        | 00000001      | 4801 LTI_LEV(1-0)                     |
| 160 | 4P-LLV      | 01                            | 01                        | 00000001      | 480P LTI_LEV(1-0)                     |
| 161 | 1I-LLV      | 01                            | 01                        | 00000001      | 1080I LTI_LEV(1-0)                    |
| 162 | 7P-LLV      | 01                            | 01                        | 00000001      | 720P LTI_LEV(1-0)                     |
| 163 | D-LLV       | 01                            | 01                        | 00000001      | DIGITAL LTI_LEV(1-0)                  |

| No  | TITLE            | INITIAL REFERENCE<br>DATA HEX | INITIAL SETUP<br>DATA HEX | INITIAL SETUR<br>DATA BINAR | FUNCTION                    |
|-----|------------------|-------------------------------|---------------------------|-----------------------------|-----------------------------|
| 164 |                  | 00                            | 00                        | 00000000                    | RF CTI_MODE(0)              |
| 165 |                  | 00                            | 00                        | 00000000                    | 4801 CTI_MODE(0)            |
| 166 |                  | 00                            | 00                        | 00000000                    | 480P CTI_MODE(0)            |
| 167 |                  | 00                            | 00                        | 00000000                    | 1080I CTI_MODE(0)           |
| 168 |                  | 00                            | 00                        | 00000000                    | 720P CTI_MODE(0)            |
| 169 |                  | 00                            | 00                        | 00000000                    | DIGITAL CTI_MODE(0)         |
| 16A |                  | 02                            | 02                        | 00000010                    | 1125I ÇfAMMA(1-0)           |
| 16B | RF-LMD           | 00                            | 00                        | 00000000                    | RF LTI_MODE(0)              |
| 16C | 4I-LMD           | 00                            | 00                        | 00000000                    | 480I LTI_MODE(0)            |
| 16D | 4P-LMD           | . 00                          | 00                        | 00000000                    | 480P LTI_MODE(0)            |
| 16E | 11-LMD           | 00                            | 00                        | 00000000                    | 1080I LTI_MODE(0)           |
| 16F | 7P-LMD           | 00                            | 00                        | 00000000                    | 720P LTI_MODE(0)            |
| 170 | D-LMD            | 00                            | 00                        | 00000000                    | DIGITAL LTI_MODE(0)         |
| 171 | RF-CB            | 00                            | 01*                       | 00000001                    | RF CB_OFFSET                |
| 172 | 4I-CB            | 00                            | 01*                       | 00000001                    | 4801 CB_OFFSET              |
| 173 | 4P-CB            | F0                            | FF*                       | 11111111                    | 480P CB_OFFSET              |
| 174 | 1I-CB            | F0                            | FE*                       | 11111110                    | 1080I CB_OFFSET             |
| 175 | 7P-CB            | FO                            | FF*                       | 11111111                    | 720P CB_OFFSET              |
| 176 | D-CB             | F0                            | F8*                       | 11111000                    | DIGITAL CB_OFFSET           |
| 177 | W-CB             | 00                            | 00                        | 00000000                    | 000000 LETTER BOX CB_OFFSET |
| 178 | RF-CR            | 00                            | FE*                       | 11111110                    | RF CR_OFFSET                |
| 179 | 4I-CR            | 00                            | FB*                       | 11111011                    | 480I CR_OFFSET              |
| 17A | 4P-CR            | F0                            | F9*                       | 11111001                    | 480P CR_OFFSET              |
| 17B | 11-CR            | F0                            | F6*                       | 11110110                    | 1080I CR_OFFSET             |
| 17C | 7P-CR            | 00                            | F5*                       | 11110101                    | 720P CR_OFFSET              |
| 17D | D-CR             | 00                            | F6*                       | 11110110                    | DIGITAL CR_OFFSET           |
| 17E | W-CR             | 00                            | 00                        | 00000000                    | LETTER BOX CR_OFFSET        |
| 17F | RF-SYS           | 00                            | 00                        | 00000000                    | RF SYSTEM(1-0)              |
| 180 | 4I-SYS           | 00                            | 00                        | 00000000                    | 480I SYSTEM(1-0)            |
| 181 | 4P-SYS           | 00                            | 00                        | 00000000                    | 480P SYSTEM(1-0)            |
| 183 | 11-SYS           | 01                            | 01                        | 00000001                    | 1080I SYSTEM(1-0)           |
| 184 | 7P-SYS           | 01                            | 01                        | 00000001                    | 720P SYSTEM(1-0)            |
| 185 | D-SYS            | 00                            | 01*                       | 00000001                    | DIGITAL SYSTEM(1-0)         |
| 186 | RF-VMD<br>4I-VMD | 00                            | 00                        | 00000000                    | RF VM_DLY(1-0)              |
| 187 | 4P-VMD           | 00                            | 00                        | 00000000                    | 480I VM_DLY(1-0)            |
| 188 | 1I-VMD           | 00                            | 00                        | 00000000                    | 480P VM_DLY(1-0)            |
| 189 | 7P-VMD           | 00                            | 00                        | 00000000                    | 1080I VM_DLY(1-0)           |
| 18A | D-VMD            | 00                            | 00                        | 00000000                    | 720P VM_DLY(1-0)            |
| 18B | RF-VMF           | 00                            | 00                        | 00000000                    | DIGITAL VM_DLY(1-0)         |
| 18C | 4I-VMF           | 02                            | 02                        | 00000010                    | RF VM_F0(1-0)               |
| 18D | 4P-VMF           | 02                            | 02                        | 00000010                    | 480I VM_F0(1-0)             |
| 18E | 1I-VMF           | 02                            | 02                        | 00000010                    | 480P VM_F0(1-0)             |
| 18F | 7P-VMF           | 02                            | 02                        | 00000010                    | 1080I VM_F0(1-0)            |
| 190 | D-VMF            | 02                            | 02                        | 00000010                    | 720P VM_F0                  |
| 191 | W-VMF            | 02                            | 02                        | 00000010                    | DIGITAL VM_F0               |
| 192 | RF-RYR           | 02                            | 02                        | 00000010                    | LETTER BOX VM_F0            |
| 193 | 4I-RYR           | 08                            | 08                        | 00001000                    | RF RYR(3-0)                 |
| 194 | 4P-RYR           | 80                            | 08                        | 00001000                    | 4801 RYR(3-0)               |
| 195 | 1J-RYR           | 80                            | 08                        | 00001000                    | 480P RYR(3-0)               |
| 196 | 7P-RYR           | 80                            | 00                        | 00001000                    | 1080( RYR(3-0)              |
| 197 | D-RYR            | 08                            | 08                        | 00001000                    | 720P RYR(3-0)               |
| 198 | RF-RYB           | 08                            | 00                        | 00001000                    | DIGITAL RYR(3-0)            |
| 199 | 4I-RYB           | 08                            | 08                        | 00001000                    | RF RYB(3-0)                 |
| .00 | 41-1111          | 80                            | 08                        | 00001000                    | 480! RYB(3-0)               |

Table 1. ON-SCREEN SERVICE MENU (Continued)

|              | 1           | INTELL DECEMBER OF            | Υ                         | <u> </u>                     |                           |
|--------------|-------------|-------------------------------|---------------------------|------------------------------|---------------------------|
| No.          | <del></del> | INITIAL REFERENCE<br>DATA HEX | INITIAL SETUP<br>DATA HEX | INITIAL SETUP<br>DATA BINARY | FUNCTION                  |
| 194          |             | 08                            | 08                        | 00001000                     | 480P RYB(3-0)             |
| 19B          |             | 08                            | 80                        | 00001000                     | 1080I RYB(3-0)            |
| 190          |             | 08                            | 80                        | 00001000                     | 720P RYB(3-0)             |
| 19D          | <del></del> | 08                            | 08                        | 00001000                     | DIGITAL RYB(3-0)          |
| 19E          | 3           | 08                            | 08                        | 00001000                     | RF GYR(3-0)               |
| 19F          | 4I-GYR      | 80                            | 08                        | 00001000                     | 480I GYR(3-0)             |
| 1A0          | 4P-GYR      | 08                            | 08                        | 00001000                     | 480P GYR(3-0)             |
| 1A1          | 1I-GYR      | 08                            | . 08                      | 00001000                     | 1080I GYR(3-0)            |
| 1A2          | 7P-GYR      | - 08                          | 08                        | 00001000                     | 720P GYR(3-0)             |
| 1A3          | D-GYR       | 08                            |                           | 00001000                     | DIGITAL GYR(3-0)          |
| 1A4          | RF-GYB      | 08                            | 08                        | 00001000                     | RF GYB(3-0)               |
| 1A5          | 4I-GYB      | 08                            | 08                        | 00001000                     | 480I GYB(3-0)             |
| 1A6          | 4P-GYB      | 08                            | 08                        | 00001000                     | 480P GYB(3-0)             |
| 1A7          | 1I-GYB      | 08                            | 08                        | 00001000                     | 1080F GYB(3-0)            |
| 1A8          | 7P-GYB      | 08                            | 08                        | 00001000                     | 720P GYB(3-0)             |
| 1A9          | D-GYB       | 08                            | 08                        | 00001000                     | DIGITAL GYB(3-0)          |
| 1AA          | RF-VLV      | 0F                            | 0F                        | 00001111                     | RF VM_LEV(3-0)            |
| 1AB          | 4I-VLV      | 0F                            | 0F                        | 00001111                     | 480I VM_LEV(3-0)          |
| 1AC          | 4P-VLV      | 0F                            | 0F                        | 00001111                     | 480P VM_LEV(3-0)          |
| 1AD          | 1I-VLV      | 0F                            | 0F                        | 00001111                     | 1080I VM_LEV(3-0)         |
| 1AE          | 7P-VLV      | 0F                            | OF                        | 00001111                     | 720P VM_LEV(3-0)          |
| 1AF          | D-VLV       | 0F                            | 0F                        | 00001111                     | 1080l VM_LEV(3-0)         |
| 1B0          | W-VLV       | 00                            | 00                        | 00000000                     | LETTER BOX VM_LEV(3-0)    |
| 1 <u>B</u> 1 | 1B1         | 00                            | 00                        | 00000000                     | PRELIMINARY               |
| 1B2          | 1B2         | 00                            | 00                        | 00000000                     | PRELIMINARY               |
| 1B3          | 1B3         | 00                            | 00                        | 00000000                     | PRELIMINARY               |
| 1B4          | 184         | 00                            | 00                        | 00000000                     | PRELIMINARY               |
| 1B5          | 1B5         | 00                            | 00                        | 00000000                     | PRELIMINARY               |
| 1B6          | RWUBK       | 00                            | 00                        | 00000000                     | RF-LETTER BOX_UP_BLK      |
| 1 <b>B</b> 7 | RWLBK       | 00                            | 00                        | 00000000                     | RF-LETTER BOX LO_BLK      |
| 1B8          | RWVS        | 00                            | 00                        | 00000000                     | RF-LETTER BOX V_SIZE      |
| 1B9          | RWVPS       | 00                            | 00                        | 0000000                      | RF-LETTER BOX V_POSITION  |
| 18A          | RWUUC       | 00                            | 00                        | 00000000                     | RF-LETTER BOX_UP_UCP      |
| 1BB          | RWPAP       | 00                            | 00                        | 00000000                     | RF-LETTER BOX PIN_AMP     |
| 1BC          | RWLUP       | 00                            | 00                        | 00000000                     | RF-LETTER BOX LO_UCP      |
| 1BD          | RWUCP       | 00                            | 00                        | 00000000                     | RF-LETTER BOX UP_CPIN     |
| 1BE          | RWUUG       | 00                            | 00                        | 00000000                     | RF-LETTER BOX UP UCG      |
| 1BF          | RWLCP       | 00                            | 00                        | 00000000                     | RF-LETTER BOX_LO_CPIN     |
| 1C0          | RWLUG       | 00                            | 00                        | 00000000                     | RF-LETTER BOX LO UCG      |
| 1C1          | RWPPH       | 00                            | 00                        | 00000000                     | RF-LETTER BOX PIN_PHASE   |
| 1C2          | RWVBS       | 00                            | 00                        | 00000000                     | RF-LETTER BOX VBLK_SW     |
| 1C3          | RWABO       | 00                            | 00                        | 00000000                     | RF-LETTER BOX AFC_BOW     |
| 1C4          | RWAAN       | 00                            | 00                        | 00000000                     | RF-LETTER BOX AFC_BOVV    |
| 1C5          | RWVAS       | 00                            | 00                        | 00000000                     | RF-LETTER BOX V_ASPECT    |
| 1C6          | RWJSW       | 00                            | 00                        | 00000000                     | RF-LETTER BOX V_ASPECT    |
| 1C7          | RWVSR       | 00                            | 00                        | 00000000                     | RF-LETTER BOX V_SCROLL    |
| 1C8          | 1C8         | 00                            | 00                        | 00000000                     |                           |
| 1C9          | CFUBK       | 00                            | 00                        | 00000000                     | RF-LETTER BOX PRELIMINARY |
| 1CA          | CFLBK       | 00                            | 00                        | 00000000                     | VIDEO1/2-FULL UP_BLK      |
| 1CB          | CFVS        | 00                            | 00                        |                              | VIDEO1/2-FULL LO_BKL      |
| 1CC          | CFVPS       | 00                            | 00                        | 00000000                     | VIDEO1/2-FULL V_SIZE      |
|              |             | •••                           | 00                        | 00000000                     | VIDEO1/2-FULL V_POSITION  |

| No. | TITLE   | INITIAL REFERENCE<br>DATA HEX | INITIAL SETUP<br>DATA HEX | INITIAL SETUP<br>DATA BINARY |                                 |  |
|-----|---------|-------------------------------|---------------------------|------------------------------|---------------------------------|--|
| 1CD | CFHSI   | 00                            | 00                        | 00000000                     | VIDEO1/2-FULL H_SIZE            |  |
| 1CE | CFHPO   | 00                            | 00                        | 00000000                     | VIDEO1/2-FULL H_POSITION        |  |
| 1CF | CFLBK   | 00                            | 00                        | 00000000                     | VIDEO1/2-FULL L_BLK             |  |
| 1D0 | CFRBK   | 00                            | 00                        | 00000000                     | VIDEO1/2-FULL R_BLK             |  |
| 1D1 | CFVAS   | 00                            | 00                        | 00000000                     | VIDEO1/2-FULL V_ASPECT          |  |
| 1D2 | CFVSR   | 00                            | 00                        | 00000000                     | VIDEO1/2-FULL V_SCROLL          |  |
| 1D3 | CWUBK   | 09                            | 08*                       | 00001000                     | VIDEO1/2-LETTER BOX LO_BLK      |  |
| 1D4 | CWLBK   | OD I                          | 0B*                       | 00001011                     | VIDEO1/2-LETTER BOX LO_BLK      |  |
| 1D5 | cwvs    | 00                            | 00                        | 00000000                     | VIDEO1/2-LETTER BOX V_SIZE      |  |
| 1D6 | CWVPS   | 00                            | 00                        | 00000000                     | VIDEO1/2-LETTER BOX V_POSITION  |  |
| 1D7 | CWVBS   | 01                            | 01                        | 0000001                      | VIDEO1/2-LETTER BOX VBLK_SW     |  |
| 1D8 | CWVAS   | 12                            | 12                        | 00010010                     | VIDEO1/2-LETTER BOX V_ASPECT    |  |
| 1D9 | CWJSW   | 01                            | 01                        | 00000001                     | VIDEO1/2-LETTER BOX JMP_SW      |  |
| 1DA | CWVSR   | 00                            | 00                        | 00000000                     | VIDEO1/2-LETTER BOX V_SCROLL    |  |
| 1DB | 1DB     | 00                            | 00                        | 00000000                     | VIDEO1/2-LETTER BOX PRELIMINARY |  |
| 1DC | 4IUBK   | 00                            | 00                        | 00000000                     | 480I-FULL UP_BLK                |  |
| 10D | 4ILBK   | 00                            | 00                        | 00000000                     | 480I-FULL LO_BLK                |  |
| 1DE | 4IVS    | 00                            | 00                        | 00000000                     | 480I-FULL V_SIZE                |  |
| 1DF | 4IVPS   | 00                            | 00                        | 00000000                     | 480I-FULL V_POSITION            |  |
| 1E0 | 4IHSI   | 00                            | 00                        | 00000000                     | 480I-FULL H_SIZE                |  |
| 1E1 | 4iHPO   | 00                            | 00                        | 00000000                     | 480I-FULL H_POSITION            |  |
| 1E2 | 4ILBK   | 00                            | 00                        | 00000000                     | 480I-FULL L BLK                 |  |
| 1E3 | 4IRBK   | 00                            | 00                        | 00000000                     | 480I-FULL R_BLK                 |  |
| 1E4 | 4IVAS   | 00                            | 00                        | 00000000                     | 480I-FULL V_ASPECT              |  |
| 1E5 | 4IVSR   | 00                            | 00                        | 00000000                     | 480I-FULL V_SCROLL              |  |
| 1E6 | 4IWUBK  | 00                            | 08                        | 00001000                     | 480I-LETTER BOX UP_BLK          |  |
| 1E7 | 4lWLBK  | OB                            | 0B                        | 00001011                     | 480I-LETTER BOX LO_BLK          |  |
| 1E8 | 4IWVS   | 00                            | 00                        | 00000000                     | 480I-LETTER BOX V_SIZE          |  |
| 1E9 | 4IWVPS  | 00                            | 00                        | 00000000                     | 480I-LETTER BOX V_POSITION      |  |
| 1EA | 4lWVB\$ | 01                            | 01                        | 0000000                      | 1480I-LETTER BOX VBLK_SW        |  |
| 1EB | 4IWVAS  | 12                            | 12                        | 00010010                     | 480I-LETTER BOX V_ASPECT        |  |
| 1EC | 4lWJSW  | 01                            | 01                        | 00000001                     | 480I-LETTER BOX JMP_SW          |  |
| 1ED | 4IWVSR  | 00                            | 00                        | 00000000                     | 480I-LETTER BOX V_SCROLL        |  |
| 1EE | 1EE     | 00                            | 00                        | 00000000                     | 480I PRELIMINARY                |  |
| 1EF | 4PUBK   | 00                            | 00                        | 00000000                     | 480P-FULL UP_BLK                |  |
| 1F0 | 4PLBK   | 00                            | 00                        | 00000000                     | 480P-FULL LO_BLK                |  |
| 1F1 | 4PVS    | 00                            | 00                        | 00000000                     | 480P-FULL V_SIZE                |  |
| 1F2 | 4PVPS   | 00                            | 00                        | 00000000                     | 480P-FULL V_POSITION            |  |
| 1F3 | 4PHSI   | 00                            | 00                        | 00000000                     | 480P-FULL H_SIZE                |  |
| 1F4 | 4PHPO   | 00                            | 00                        | 00000000                     | 480P-FULL H_POSITION            |  |
| 1F5 | 4PLBK   | 00                            | 00                        | 00000000                     | 480P-FULL L_BLK                 |  |
| 1F6 | 4PRBK   | 00                            | 00                        | 00000000                     | 480P-FULL R_BLK                 |  |
| 1F7 | 4PVAS   | 00                            | 00                        | 00000000                     | 480P-FULL V_ASPECT              |  |
| 1F8 | 4PVRS   | 00                            | 00                        | 00000000                     | 480P-FULL V_SCROLL              |  |
| 1F9 | 4PWUBK  | 09                            | 08                        | 00001000                     | 480P-LETTER BOX UP_BLK          |  |
| 1FA | 4PWLBK  | 0D                            | *80                       | 00001011                     | 480P-LETTER BOX LO_BLK          |  |
| 1FB | 4PWVS   | 00                            | 00                        | 00000000                     | 480P-LETTER BOX V_SIZE          |  |
| 1FC | 4PWVPS  | 00                            | 00                        | 00000000                     | 480P-LETTER BOX V_POSITION      |  |
| 1FD | 4PWVBS  | 01                            | 01                        | 00000001                     | 480P-LETTER BOX VBLK_SW         |  |
| 1FE | 4PWVAS  | 12                            | 12                        | 00010010                     | 480P-LETTER BOX V_ASPECT        |  |
| 1FF | 4PWJSW  | 01                            | 01                        | 00000001                     | 480P-LETTER BOX JMP_SW          |  |
| 200 | 4PWVSR  | 00                            | 00                        | 00000000                     | 480P-LETTER BOX V_SCROLL        |  |
| 201 | 201     | 00                            | 00                        | 00000000                     | 480P PRELIMINARY                |  |
| 202 | 7PUBK   | 00                            | 00                        | 00000000                     | 720P-FULL UP_BLK                |  |

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Table 1. ON-SCREEN SERVICE MENU (Continued)

| No          | TITLE  | INITIAL REFERENCE | INITIAL SETUP | INITIAL SETUP | EUNICTION                                    |  |
|-------------|--------|-------------------|---------------|---------------|--|--|
| 203         | 7PLBK  | DATA HEX<br>00    | DATA HEX      | DATA BINARY   | FUNCTION                                     |  |
| 204         | 7PVS   | 00                | 00            | 00000000      | 720P-FULL LO_BLK                             |  |
| 205         | 7PVPS  | 00                | 00            | 00000000      | 720P-FULL V_SIZE                             |  |
| 206         | 7PHSI  | 00                |               | 00000000      | 720P-FULL V_POSITION                         |  |
| 207         | 7PHPO  | <del></del>       | 00            | 00000000      | 720P-FULL H_SIZE                             |  |
| 208         |        | 00                | 00            | 00000000      | 720P-FULL H_POSITION                         |  |
| 209         | 7PLBK  | 00                | 00            | 00000000      | 720P-FULL L_BLK                              |  |
| <del></del> | 7PRBK  | 00                | 00            | 00000000      | 720P-FULL R_8LK                              |  |
| 20A         | 7PVAS  | 00                | 00            | 00000000      | 720P-FULL V_ASPECT                           |  |
| 208         | 7PVSR  | 00                | 00            | 00000000      | 720P-FULL V_SCROLL                           |  |
| 20C         | 7PWUBK | 09                | 08*           | 00001000      | 720P-LETTER BOX UP_BLK                       |  |
| 20D         | 7PWLBK | OD OD             | 0B*           | 00001011      | 720P-LETTER BOX LO_BLK                       |  |
| 20E         | 7PWVS  | 00                | 00            | 00000000      | 720P-LETTER BOX V_SIZE                       |  |
| 20F         | 7PWVPS | 00                | 00            | 00000000      | 720P-LETTER BOX V_POSITION                   |  |
| 210         | 7PWVBS | 01                | 01            | 00000001      | 720P-LETTER BOX VBLK_SW                      |  |
| 211         | 7PWVAS | 12                | 12            | 00010010      | 720P-LETTER BOX V_ASPECT                     |  |
| 212         | 7PWJSW | 01                | 01            | 00000001      | 720P-LETTER BOX JMP_SW                       |  |
| 213         | 7PWVSR | 00                | 00            | 00000000      | 720P-LETTER BOX V_SCROLL                     |  |
| 214         | 214    | 00                | 00            | 00000000      | 720P PRELIMINARY                             |  |
| 215         | 1IUBK  | 00                | 00            | 00000000      | 1080I-FULL UP_BLK                            |  |
| 216         | 1/LBK  | 00                | 00            | 00000000      | 1080FFULL LO_BLK                             |  |
| 217         | 1IVS   | 00                | 00            | 00000000      | 1080I-FULL V_SIZE                            |  |
| 218         | 1IVPS  | 00                | 00            | 00000000      | 1080I-FULL V_POSITION                        |  |
| 219         | 1IHSI  | 00                | 00            | 00000000      | 1080I-FULL H_SIZE                            |  |
| 21A         | 1!HPO  | 00                | 00            | 00000000      | 1080I-FULL H_POSITION                        |  |
| 21B         | 1 ILBK | 00                | 00            | 00000000      | 1080I-FULL L_BLK                             |  |
| 21C         | 1IRBK  | 00                | 00            | 00000000      | 1080I-FULL R_BLK                             |  |
| 21D         | 1IVAS  | 00                | 00            | 00000000      | 1080I-FULL V_ASPECT                          |  |
| 21E         | 1/VSR  | 00                | 00            | 00000000      | 1080I-FULL V_SCROLL                          |  |
| 21F         | 1IWUBK | 09                | 08*           | 00001000      | 1080I-LETTER BOX UP_BLK                      |  |
| 220         | 11WLBK | OC                | 0B*           | 00001011      | 1080I-LETTER BOX LO_BLK                      |  |
| 221         | 1IWVS  | 00                | 00            | 00000000      | 1080I-LETTER BOX V_SIZE                      |  |
| 222         | 1IWVPS | 00                | 00            | 00000000      | 1080I-LETTER BOX V_POSITION                  |  |
| 223         | 1IWVBS | 01                | 01            | 00000001      | 1080I-LETTER BOX VBLK SW                     |  |
| 224         | 1IWVAS | 12                | 12            | 00010010      | 1080FLETTER BOX V_ASPECT                     |  |
| 225         | 1lWJSW | 01                | 01            | 00000001      | 1080I-LETTER BOX JMP SW                      |  |
| 226         | 1IWVSR | 00                | 00            | 00000000      | 1080I-LETTER BOX V_SCROLL                    |  |
| 227         | 227    | 00                | 00            | 00000000      | 1080I PRELIMINARY                            |  |
| 228         | DUBK   | 00                | 00            | 00000000      | DIGITAL-FULL UP_BLK                          |  |
| 229         | DLBK   | 00                | 00            | 00000000      | DIGITAL-FULL LO BLK                          |  |
| 22A         | DVS    | 00                | 00            | 00000000      | DIGITAL-FULL V_SIZE                          |  |
| 22B         | DVPS   | 00                | 01*           | 00000001      | DIGITAL-FULL V POSITION                      |  |
| 22C         | DHSI   | 00                | 00            | 00000000      | DIGITAL-FULL V_POSITION  DIGITAL-FULL H_SIZE |  |
| 22D         | DHPO   | 00                | 00            | 00000000      | DIGITAL-FULL H_POSITION                      |  |
| 22E         | DLBK   | 00                | 00            | 00000000      | DIGITAL-FULL H_POSITION  DIGITAL-FULL L_BLK  |  |
| 22F         | DRBK   | 00                | 00            | 00000000      | DIGITAL-FULL R_BLK                           |  |
| 230         | DVAS   | 00                | 00            | 00000000      | DIGITAL-FULL V_ASPECT                        |  |
| 231         | DVSR   | 00                | 00            | 00000000      | DIGITAL-FULL V_SCROLL                        |  |
| 232         | 232    | 00                | 00            | 00000000      |  |  |
| 233         | RZVS   | 00                | 00            | 00000000      | DIGITAL PRELIMINARY  REZODAL V SIZE          |  |
| 234         | RZVPS  | 00                | 00            | 00000000      | RF-ZOOM V DOCUTION                           |  |
| 235         | RZVBS  | 00                | 00            | 00000000      | RF-ZOOM VPI K SW                             |  |
|             |        |                   |               | 00000000      | RF-ZOOM VBLK_SW                              |  |

| No.   | TITLE   | INITIAL REFERENCE<br>DATA HEX | INITIAL SETUP<br>DATA HEX | INITIAL SETUP<br>DATA BINARY | FUNCTION                  |
|-------|---------|-------------------------------|---------------------------|------------------------------|---------------------------|
| 236   | RZVAS   | 00                            | 00                        | 00000000                     | RF-ZOOM V_ASPECT          |
| 237   | RZZSW   | 00                            | 00                        | 00000000                     | RF-ZOOM ZOOM_SW           |
| 23B   | RZVSR   | 00                            | 00                        | 00000000                     | RF-ZOOM V_SCROLL          |
| 239   | 239     | 00                            | 00                        | 00000000                     | RF PRELIMINARY            |
| 23A   | CZVS    | 00                            | 00                        | 00000000                     | VIDEO1/2-ZOOM V_SIZE      |
| 23B   | CZVPS   | 00                            | 00                        | 00000000                     | VIDEO1/2-ZOOM V_POSITION  |
| 23C   | CZVAS   | 00                            | 00                        | 00000000                     | VIDEO1/2-ZOOM V_ASPECT    |
| 23D . | CZVSR   | 00                            | 00                        | 00000000                     | VIDEO1/2-ZOOM V_SCROLL    |
| 23E   | 23E     | 00                            | 00                        | 00000000                     | VIDEO1/2 PRELIMINARY      |
| 23F   | 4IZVS   | 00                            | 00                        | 00000000                     | 480I-ZOOM V_SIZE          |
| 240   | 4IZVPS  | 00                            | 00                        | 00000000                     | 4B0I-ZOOM V_POSITION      |
| 241   | 4IZVAS  | 00                            | 00                        | 00000000                     | 480I-ZOOM V_ASPECT        |
| 242   | 4IZVSR  | 00                            | 00                        | 00000000                     | 480I-ZOOM V_SCROLL        |
| 243   | 243     | 00                            | 00                        | 00000000                     | 480I PRELIMINARY          |
| 244   | 4PZVS   | 00                            | 00                        | 00000000                     | 480P-ZOOM V_SIZE          |
| 245   | 4PZVPS  | 00                            | 00                        | 00000000                     | 480P-ZOOM V_POSITION      |
| 246   | 4PZVAS  | 00                            | 00                        | 00000000                     | 480P-ZOOM V_ASPECT        |
| 247   | 4PZVSR  | 00                            | 00                        | 00000000                     | 480P-ZOOM V_SCROLL        |
| 248   | 248     | 00                            | 00                        | 00000000                     | 480P PRELIMINARY          |
| 249   | 4PZVS   | 00                            | 00                        | 00000000                     | 720P-ZOOM V_SIZE          |
| 24A   | 4PZVPS  | 00                            | 00                        | 00000000                     | 720P-ZOOM V_POSITION      |
| 24B   | 4PZVAS  | 00                            | 00                        | 00000000                     | 720P-ZOOM V_ASPECT        |
| 24C   | 4PZVSR  | 00                            | 00                        | 00000000                     | 720P-ZOOM V_SCROLL        |
| 24D   | 24D     | 00                            | 00                        | 00000000                     | 720P PRELIMINARY          |
| 24E   | 1IZVS   | 00                            | 00                        | 00000000                     | 1080I-ZOOM V_SIZE         |
| 24F   | 1IZVPS  | 00                            | 00                        | 00000000                     | 1080I-ZOOM V_POSITION     |
| 250   | 1IZVAS  | 00                            | 00                        | 00000000                     | 1080I-ZOOM V_ASPECT       |
| 251   | 11ZVSR  | 00                            | 00                        | 00000000                     | 1080I-ZOOM V_SCROLL       |
| 252   | 252     | 00                            | 00                        | 00000000                     | 1080/ PRELIMINARY         |
| 253   | DZVS    | 00                            | 00                        | 00000000                     | DIGITAL-ZOOM V_SIZE       |
| 254   | DZVPS   | 00                            | 00                        | 00000000                     | DIGITAL-ZOOM V_POSITION   |
| 255   | DZVAS ' | 00                            | 00                        | 00000000                     | DIGITAL-ZOOM V_ASPECT     |
| 256   | DZVSR   | 00                            | 00                        | 00000000                     | DIGITAL-ZOOM V_SCROLL     |
| 257   | 257     | 00                            | 00                        | 00000000                     | DIGITAL PRELIMINARY       |
| 258   | PUBK    | 07                            | 08*                       | 00001000                     | PAP-ON UP_BLK             |
| 259   | PLBK    | 0F                            | 0F                        | 00001011                     | PAP-ON LO_BLK             |
| 25A   | PVS     | 00                            | 00                        | 00000000                     | PAP-ON V_SIZE             |
| 25B   | PVPS    | 00                            | 00                        | 00000000                     | PAP-ON V_POSITION         |
| 25C   | PUUC    | 00                            | 00                        | 00000000                     | PAP-ON UP_UCP             |
| 25D   | PPAP    | 00                            | 00                        | 00000000                     | PAP-ON PIN_AMP            |
| 25E   | PLUP    | 00                            | 00                        | 00000000                     | PAP-ON LO_UCP             |
| 25F   | PUCP    | 00                            | 00                        | 00000000                     | PAP-ON UP_UCP             |
| 260   | PUUG    | 00                            | 00                        | 00000000                     | PAP-ON UP_UCG             |
| 261   | PLCP    | 00                            | 00                        | 00000000                     | PAP-ON LO_CPIN            |
| 262   | PLUG    | 00                            | 00                        | 00000000                     | PAP-ON LO_UCG             |
| 263   | PPPH    | 00                            | 00                        | 00000000                     | PAP-ON PIN_PHASE          |
| 264   | PVBS    | 01                            | 01                        | 00000001                     | PAP-ON VBLK_SW            |
| 265   | PABO    | 00                            | 00                        | 00000000                     | PAP-ON AFC_BOW            |
| 266   | PAAN    | 00                            | 00                        | 00000000                     | PAP-ON AFC_ANGLE          |
| 267   | PVAS    | 12                            | 12                        | 00010010                     | PAP-ON V_ASPECT           |
| 268   | PJSW    | 01                            | 01                        | 00000001                     | PAP-ON JMP_SW             |
| 269   | PVSR    | 00                            | 00                        | 00000000                     | PAP-ON V_SCROLL           |
| 26A   | 26A     | 00                            | 00                        | 00000000                     | PAP-ON PRELIMINARY        |
| 26B   | DWUBK   | 07                            | 08*                       | 00001000                     | DIGITAL-LETTER BOX UP_BLK |

**Table 1. ON-SCREEN SERVICE MENU (Continued)** 

|       | <u> </u>         | <del></del>                   | 7                         |                              |   |  |
|-------|------------------|-------------------------------|---------------------------|------------------------------|---|--|
| No.   | TITLE            | INITIAL REFERENCE<br>DATA HEX | INITIAL SETUP<br>DATA HEX | INITIAL SETUP<br>DATA BINARY | FUNCTION  |  |
| 26C   | DWLBK            | 0F                            | 0B*                       | 00001011                     | DIGITAL-LETTER BOX LO_BLK                               |  |
| 26D   | DWVS             | 00                            | 00                        | 00000000                     | DIGITAL-LETTER BOX V_SIZE                               |  |
| 26E   | DWVPS            | 00                            | 00                        | 00000000                     | DIGITAL-LETTER BOX V_POSITION                           |  |
| 26F   | DWVBS            | 01                            | 01                        | 00000001                     | DIGITAL-LETTER BOX VBLK_SW                              |  |
| 270   | DWVAS            | 12                            | 12                        | 00010010                     | DIGITAL-LETTER BOX V_ASPECT                             |  |
| 271   | DWJSW            | 01                            | 01                        | 00000001                     | DIGITAL-LETTER BOX ZOOM_SW                              |  |
| 272   | DWVSR            | 00                            | 00                        | 00000000                     | DIGITAL-LETTER BOX V_SCROLL                             |  |
| 040   | HU2DO1CY         | 83                            | 83                        | 10000011                     | HUE(7-2),DPIC_OFF(1),CV/YC(0)                           |  |
| 041   | COL2RHM1CAN      | 52                            | 52                        | 01010010                     | COLOR(7-2), RF HMASK(1), CANAL(0)                       |  |
| 042   | SHA4SCO          | 47                            | 47                        | 01000111                     | SHARPNESS(7-4), SUBCONT(3-0)                            |  |
| 043   | SHU4SCL          | 77                            | 72*                       | 01110010                     | SUBHUE(7-4), SUBCOLOR(3-0)                              |  |
| 044   | CAJ4RAF2TRO1TOO  | 78                            | 78                        | 01111000                     | CTRAPADJ(7-4),AFC(3-2),TRAPON(1),TOT ON(0)              |  |
| 045   | YD3SF2FO1CM2     | 2A                            | 32*                       | 00110010                     | Y DRIVE(7-3), SHP-f0(2), FSC OUT(1), CD MODE2(0)        |  |
| 046   | UPD4VPD          | 68                            | 68                        | 01101000                     | U PED(7-4), V PED(3-0)                                  |  |
| 047   | U2PD4V2PD        | 00                            | 00                        | 00000000                     | U2 PED(7-4), V2 PED(3-0)                                |  |
| 048   | Y2D3DCT          | 00                            | 00                        | 00000000                     | Y2 DRIVE(7-3), DC TRAN(2-0)                             |  |
| 049   | U2D3PRO1         | 00                            | 00                        | 00000000                     | U2 DRIVE(7-3), PRE OVER(2-1), bit0: 0 (bit0: fixed)     |  |
| 04A   | V2D              | 00                            | 00                        | 00000000                     | V2(7-3), bit2: 0, bit1: 0, bit0: 0 (bit2 / 1/ 0: fixed) |  |
| 04B   | CS6XP4VF2DL      | 02                            | 02                        | 00000010                     | CS(7-6),XP(5-4),VF(3-2),DL(1-0)                         |  |
| 04C   | -                | 01                            | 01                        | 00000001                     | bit7, 6: 0, bit5, 4: 0, bit3, 2: 0, bit1: 0 ,bit0: 1    |  |
| 04D   | EXAFC            | 00                            | 00                        | 00000000                     | EX(V1/V2)AFC  |  |
| 04E   | EXCAFC           | 01                            | 01                        | 00000001                     | EX(V3)AFC   |  |
| 04F   | 04F              | 00                            | 00                        | 00000000                     | PRELIMINARY   |  |
| 050   | HF61SW42SW2SL    | 3C                            | 3C                        | 00111100                     | HF6(7-6),1SW(5-4), 2SW(3-2), SL(1-0)                    |  |
| 051   | D16D24D33T21I12I | 03                            | 03                        | 00000011                     | D16(7-6), D24(5-4), D33(3), T2(2), 111(1), 21(0)        |  |
| 052   | VF6CP4FDS2IS     | CC                            | CC                        | 11001100                     | VF6(7-5), CP(4), FDS(3-2), IS(1-0)                      |  |
| 053   | HP2V11V2         | 53                            | 7B*                       | 01111011                     | HP(7-2),V1(1),V2(0)                                     |  |
| 054   | 4PHF             | 01                            | 01                        | 00000000                     | 480P H-FREQUENCY  |  |
| 056   | 7PHF             | 03                            | 03                        | 00000000                     | 720P H-FREQUENCY  |  |
| 057   | 4PVF             | 04                            | 04                        | 00000000                     | 480P V-FREQUENCY  |  |
| 058   | 1IVF             | 03                            | 03                        | 00000000                     | 1080I V-FREQUENCY                                       |  |
| 059   | 7PVF             | 01                            | 01                        | 00000000                     | 720P V-FREQUENCY  |  |
| 05A   | WDT              | 1A                            | 1A                        | 00000000                     | WATCH DOG TIMER (*500MSEC)                              |  |
| 058   | 3D04             | 29                            | 29                        | 00000000                     | 3D Y/C DATA 04  |  |
| 05C   | 3D05             | 36                            | 36                        | 00000000                     | 3D Y/C DATA 05  |  |
| 05D   | 3D06             | 99                            | 99                        | 00000000                     | 3D Y/C DATA 06  |  |
| 05E   | 3D0A             | 52                            | 52                        | 00000000                     | 3D Y/C DATA 11  |  |
| 05F   | 3D0B             | 3A                            | 3A                        | 00000000                     | 3D Y/C DATA 12  |  |
| 060   | 3D10             | 50                            | 50                        | 00000000                     | 3D Y/C DATA 17  |  |
| 080   | · ATT            | 07                            | 07                        | 00000000                     | MTS INPUT LEVELISIO                                     |  |
| 081   | WDB              | 20-11-1                       | 20 11 20                  | 00000000                     | MTS LOW SEPARATION(5-0)                                 |  |
| 082   | SPO              | 90 1                          | 20                        | 00000000                     | MTS H SEPARATION(S.0) - 1 - 1 - 1 - 1                   |  |
| 083   | 083              | 00                            | 00                        | 00000000                     | NOT AVAILABLE   |  |
| 084   | 084              | 00                            | 00                        | 00000000                     | NOT AVAILABLE   |  |
| 085   | 085              | 00                            | 00                        | 00000000                     | NOT AVAILABLE   |  |
| 086   | 086              | 00                            | 00                        | 00000000                     | NOT AVAILABLE   |  |
| 087   | OP1 T            | in the countries              | 00.7                      | 0000000                      | OPTIONI DATA  |  |
| 389   | 100              | 70                            | 116                       | 00010000                     | OPTION2 DATA  |  |
| Senga |                  |                               | Maril Maril No.           | Commode i                    | OSD/H POSITION  |  |
| 08A   | 08A              | 00                            | 00                        | 00000000                     | NOT AVAILABLE   |  |
| 08B   | VMT              | 48                            | 48                        | 01001000                     | VIDEO MUTE TIME   |  |
|       |                  |                               |                           |                              |   |  |

| No.            | TITLE     | INITIAL REFERENCE<br>DATA HEX | INITIAL SETUP<br>DATA HEX | INITIAL SETUP<br>DATA BINARY | FUNCTION                            |
|----------------|-----------|-------------------------------|---------------------------|------------------------------|-------------------------------------|
| 08C            | AKB       | 30                            | 10*                       | 00010000                     | AKB DETECT TIME                     |
| 08D            |           | 00                            | 00                        | 0000000                      | NOT AVAILABLE                       |
| 08E            | -         | 00                            | 00                        | 00000000                     | NOT AVAILABLE                       |
| 255            |           | 00                            | 00                        | 00000000                     | NOT AVAILABLE                       |
|                | R/B DRIVE |                               |                           |                              | A/ADRIVE LEVEL AGJUSTMENT:          |
| <del>-</del> k | SCREEN    |                               | 10 10 10                  |                              | BLACK SCHEEN POR SCREEN AD JUSTMENT |
| 0B0            | ROO       | _                             | _                         | _                            | ROM CORRECTION DATA                 |
|                | <u>↓</u>  | 1                             | 1                         | <b>1</b>                     | t                                   |
| 0F7            | R47       | -                             | _                         |                              | ROM CORRECTION DATA                 |

#### **PROGRAM CODES**

The microprossesor used in this model is a multi-purpose type and is used in several different models. To ensure proper operation and the correct features for your particular model, the program codes must be correct.

Note 1. Option Data 1 (NO. 087 OP1).

Is not used in this model.

Note 2. Option Data 2 (NO. 088 OP2) should be Hexadecimal 10 (00010000 binary). If this program code is wrong the TV will not operate properly.

|          | р. оро,         |      |      |  |
|----------|-----------------|------|------|--|
| BIT      | FUNCTION        | DATA |      |  |
| <b>—</b> |                 | 0    | 1    |  |
| 0        | NOT USED        | -    | -    |  |
| 1        | TV ASPECT RATIO | 4:3  | 16:9 |  |
| 2        | NOT USED        | \    | -    |  |
| 3        | NOT USED        | _    | -    |  |
| 4        | PAP             | NONE | YES  |  |
| 5        | NOT USED        |      | _    |  |
| 6        | NOT USED        | -    |      |  |
| 7        | NOT USED        | -    | -    |  |

# **SERVICE ADJUSTMENTS (Continued)**

## ANTENNA CONNECTIONS

This receiver is designed for UHF/VHF and Digital RF reception. A 75 ohm terminal is provided for UHF/VHF reception and a separate 75 ohm terminal is provided for Digital RF reception. When connecting a CATV antenna system, connect the 75 ohm coaxial cable directly to the 75 ohm UHF/VHF terminal. For 300 ohm VHF antenna, use an adapter (not included with the TV set).

## **CIRCUIT PROTECTION**

Fuse F601 (4A) is included in the AC line. This fuse must be replaced with the proper fuse (see Parts List).

#### CAUTION



FOR CONTINUED PROTECTION AGAINST A RISK OF FIRE, REPLACE ONLY WITH THE SAME TYPE 4A, 125V FUSE.

ATTENTION: POUR MAINTENIR LA PRO-TECTION CONTRE LES RISQUES D'INCENDIE UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE 4A, 125V.

## **+B VOLTAGE CHECK**

- Connect Voltmeter + lead to TJ1 (140 V) and lead to ground (Power/Deflection board).
- 2. Connect receiver to AC 120V line.
- 3. Tune receiver to an active channel.
- Set the picture controls to the Sports level or Reset (use MENU key and ▲ or ▼ key or RESET key).
- 5. Voltage must measure between 139.0 V and 142.0V. If the voltage is out of range, the power circuit must be checked. No +B adjustment is provided on this chassis.

# HORIZONTAL CENTERING ADJUSTMENT

- 1. Tune receiver to an active analog channel.
- 2. Select Full Mode.
- 3. Check that picture is in the horizontal center of TV screen. If picture is not centered horizontally, perform steps 3 6.
- 4. Turn off the receiver and disconnect the AC power cord. (120V AC line)
- 5. While pressing the VOLUME key, reconnect the AC power cord. The Service Menu display will now appear.
- 6. Select NO. 11E (HPO2: Horizontal Position, Bit 7 2) with ▲ or ▼ key.
- Adjust the data with numeric keys for horizontal center. To turn off the Service Menu display, press the MENU key.

## HORIZONTAL WIDTH ADJUSTMENT

- 1. Tune receiver to an active analog channel.
- 2. Select Full Mode.
- 3. Check the picture for proper width. If width is not correct, perform steps 3 6.
- 4. Turn off the receiver and disconnect the AC power cord.
- While pressing the VOLUME key, reconnect the AC power cord. The Service Menu display will now appear.
- Select NO. 119 (HSI2: Horizontal Size, Bit 7 2) with ▲ or ▼ key.
- Adjust the data with numeric keys for proper width. To turn off the Service Menu display, press the MENU key.

## **VERTICAL SIZE ADJUSTMENT**

- 1. Tune receiver to an active analog channel.
- Check the vertical size of the picture. If the vertical size is too large or small, perform steps 3 ~ 6.
- 3. Turn off the receiver and disconnect the AC power cord.
- While pressing the VOLUME key, reconnect the AC power cord. The Service Menu display will now appear.
- Select NO. 116 (VS: Vertical Size, Bit 7 2) with ▲ or ▼ key.
- Adjust the data with + or key for full scan. To turn off the Service Menu display, press the MENU key.

# **VERTICAL CENTERING ADJUSTMENT**

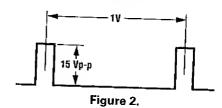
- 1. Tune receiver to an active analog channel.
- Check that picture is in the vertical center of TV screen.
   If picture is not centered vertically, perform steps 3 6.
- 3. Turn off the receiver and disconnect the AC power cord.
- While pressing the VOLUME key, reconnect the AC power cord. The Service Menu display will now appear.
- 5. Select NO. 117 (VPS: Vertical Position) with ▲ or ▼ key.
- Adjust the data with numeric key for vertical center. To turn off the Service Menu display, press the MENU key.

## **GRAYSCALE ADJUSTMENT**

- Connect a color-bar generator to the analog antenna terminal.
- 2. Switch the generator to the white pattern.
- Set the picture controls to the Sports level or Reset (use MENU key and ▲ or ▼ key or RESET key).
- 4. Turn off the receiver and disconnect the AC power cord (120V AC line).
- While pressing the VOLUME key, reconnect the AC power cord. The Service Menu display will now appear.
- Select the following service menu items with the ▲ or ▼ keys and set the data with the numeric keys.
- Select NO. 106 RD2 (Red Drive) and set data to 70, NO. 107 GD2 (Green Drive) and set data to 7F, and NO. 108 BD2 (Blue Drive) and set data to 70.
- Set NO. 10A RCT2 (Red Cutoff) data to 88, NO. 10B GCT2 (Green Cutoff) data to 5D, and NO. 10C BCT2 (Blue Cutoff) data to 75.
- Set NO. 109 SBR2 (Sub Brightness) data to 2A and NO. 105 SSH2 (Sub Sharpness) data to 89.

## Screen Adjustment

- Connect oscilloscope probe (at least 50:1) to TP47G and ground lead to TE47 on the CRT socket PWB.
- 11. Select "Screen Adjustment" Menu (between NO. 08F and 0B0) with ▲ or ▼ key (Black Picture).
- 12. Adjust Screen Control (T402) to obtain 15 Vp-p from black to white level. (See Figure 2.)



#### **Drive Level Adjustment**

- 13. Select "Drive Level Adjustment" Menu (between NO. 08E and NO. 080) with ▲ or ▼ key. The Menu display will appear.
- 14. Adjust Red and Blue Drive Levels alternately with 1, 3, 7, or 9 key to produce normal black and white picture in highlight areas. The Drive Level adjustment data will be written in the Service Menu No. 106 and 108 automatically. (See Figure 3.)

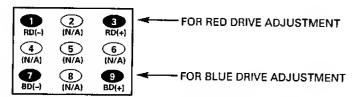


Figure 3. Remote Control Number keys' functions in Service Menu "Drive Level Adjustment"

15. Check for proper grayscale at all brightness levels.

Note: If Grayscale Adjustment is made after picture tube replacement, check Brightness Adjustment.

## **BRIGHTNESS LEVEL ADJUSTMENT**

Note: Grayscale Adjustment and High Voltage Check must be completed before attempting Brightness Level Adjustment.

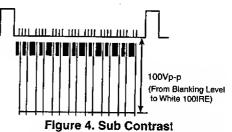
- 1. Connect a color-bar generator to the analog antenna terminal.
- 2. Switch the generator to the 15 IRE flat pattern.
- 3. Select Full Mode.
- 4. Reset the picture controls to the Sports level.
- Connect voltmeter (high impedance) + lead to terminal TP51 and - lead to terminal TP50 on P/D board. Set voltmeter for 1.5V ~ 3V range.
- 6. Turn off the receiver and disconnect the AC power cord.
- While pressing the VOLUME key, reconnect the AC power cord. The Service Menu display will now appear.
- Select NO. 109 (SBR2: Sub Brightness, Bit 7 2) with ▲ or ▼ kev.
- 9. Adjust the data with numeric keys for 20mVDC.
- 10. Press the MENU key to turn off the Service Menu display.
- Check brightness level on every active channel, readjust (repeat steps 5 ~ 9), if necessary.

Note: Do not set to excessive brightness level, otherwise the contrast level will be suppressed.

## **SUB CONTRAST ADJUSTMENT**

- 1. Connect a color-bar generator to the analog antenna terminal.
- 2. Switch the generator to the crosshatch pattern.
- Connect oscilloscope probe (at least 50:1) to TP47G and ground lead to TE47 on the CRT socket PWB.
- 4. Turn off the receiver and disconnect the AC power cord.
- While pressing the VOLUME key, reconnect the AC power cord. The Service Menu display will now appear.
- Select NO. 109 (SBR2: Sub Brightness, Bit 7 2) with ▲
  or ▼ key. Remember this data setting.

- 7. Set the data with numeric key to 2E with numeric keys.
- 8. Select NO. 10D (SCO4: Sub Contrast, Bit 7 4) with ▲ or ▼ key.
- 9. Set the data with numeric keys 4 7 for 100Vp-p.
- Reset brightness level to previous data (repeat steps 6 7). To turn off the Service Menu display, press the MENU key.



# SUB COLOR AND SUB HUE ADJUSTMENT Sub Hue (Tint)

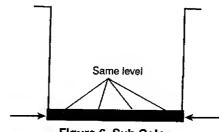
- Connect a color-bar generator to the analog antenna terminal. Set picture controls to Sports level.
- 2. Switch the generator to the color-bar (NTSC) pattern.
- 3. Connect oscilloscope probe (at least 50:1) to TP47G and ground lead to TE47 on the CRT socket PWB.
- 4. Turn off the receiver and disconnect the AC power cord.
- While pressing the VOLUME key, reconnect the AC power cord. The Service Menu display will now appear.
- 6. Select NO. 102 (SHU2: Sub HUE, Bit 7 2) with ▲ or ▼ key.
- 7. Set the data with numeric keys 2 7 for waveform shown in Figure 5.



Figure 5. Sub Hue

#### **Sub Color**

- 8. Select NO. 103 (SCL2: Sub Color, Bit 7 2) with ▲ or ▼ key.
- 9. Set the data with numeric keys 7 -2 for waveform shown in Figure 6 (Flat Waveform).
- After adjustment add 8 steps to NO. 102 (SHU2: Sub HUE) data and 8 steps to NO. 103 (SCL2: Sub Color) data. To turn off the Service Menu display, press the MENU key.



## **SERVICE ADJUSTMENTS (Continued)**

#### HIGH VOLTAGE HOLD-DOWN TEST

Every time the receiver is serviced, the HIGH VOLTAGE HOLD-DOWN circuit must be tested for proper operation by following these steps:

- Connect receiver to 120V AC line. Tune receiver to active channel. Reset the picture controls to the Sports level.
- Check that the voltage measured between TP7 and TE7 (ground side) on the P/D PC board is within 20 VDC to 24 VDC. If the voltage is out of this range, the Hold-Down Circuit must be checked.
- 3. Connect a DC Voltage supply to TP7 and TE7 through a 100 ohm 1/4W resistor. Adjust the DC voltage to 26 VDC. The receiver should shut down, losing raster and sound. Then the receiver should turn off automatically. This reaction indicates that the Hold-Down circuit is functioning properly. If the receiver does not shutdown, a malfunction is indicated and its cause must be found and corrected.
- 4. To obtain picture again, remove the DC Supply and wait a few minutes. Now turn on the receiver.

#### HIGH VOLTAGE CHECK

Note: +B (+140V) Voltage Check and Grayscale Adjustment must be completed before attempting High Voltage Check.

- Connect high voltage voltmeter lead to ground, and connect + lead to anode of picture tube.
- Tune receiver to an active channel and confirm TV is operating properly.
- 3. Eliminate the beam current by adjusting the contrast and brightness controls to minimum.
- 4. Confirm high voltage is within 28.2 KV and 32.9 KV. If reading is not within range, check horizontal circuit.

No high-voltage adjustment is provided on this chassis.

#### **FOCUS ADJUSTMENT**

Adjust focus control (T402) for well defined scanning lines.

#### **PURITY AND CONVERGENCE ADJUSTMENTS**

Purity and Convergence have been aligned at the factory. No re-alignment is necessary.

#### MULTI-SOUND SECTION ADJUSTMENTS

Note: Multi-Sound Section must be adjusted after A101 (U/V Tuner), IC3601 (MTS Decoder), Digital Module or IC802 (EEPROM) is replaced.

#### INPUT LEVEL ADJUSTMENT

- 1. Connect a signal to the analog antenna terminal with audio of 1 KHz 100% modulation.
- 2. Turn off the receiver and disconnect the AC power cord (AC 120V line).
- Connect voltmeter (RMS) to TP317 and ground on the Main PC board.
- 4. While pressing the VOLUME key, reconnect the AC power cord. The Service Menu will now appear.
- Select NO. 080 (ATT: MTS Input Level) with the ▲ or ▼ key.
- 6. Adjust the + or key for a voltmeter reading of 400  $\pm$  20 mVrms at TP317.

#### SEPARATION ADJUSTMENT

- 7. Turn off the receiver and disconnect the AC power cord (AC 120V line).
- 8. Connect oscilloscope CH1 to TP317 and CH2 to TP318 and ground.
- 9. Connect an MTS TV/Stereo generator to antenna terminal.
- 10. While pressing the VOLUME key, reconnect the AC power cord. The Service Menu will now appear.
- Select pilot, 300Hz audio frequency and Left modulating signal.
- 12. Select NO. 081 (WDB: Wide Band) with the ▲ or ▼ key.
- 13. Adjust the + or key for minimum low frequencies at TP317. (See Figure 7.)
- 14. Select 4 KHz audio frequency and Right modulating signal.
- 15. Select NO, 082 (SPC: Spectral) with the ▲ or ▼ key.
- 16. Adjust the + or key for minimum high frequencies at TP318. (See Figure 7.)

Repeat adjustments (steps 11–16) until no further decreases in amplitude can be obtained. Press the MENU key to turn off the Service Menu display.

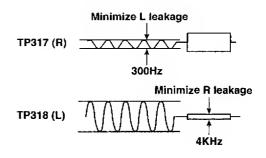


Figure 7. Separation Adjustments

#### PINCUSHION CORRECTION ADJUSTMENT

- Connect a color-bar generator to the analog antenna terminal and select a crosshatch pattern.
- 2. Set the picture controls to the Sports level.
- 3. Turn off the receiver and disconnect the AC power cord (AC 120V line).
- 4. While pressing the VOLUME key, reconnect the AC power cord. The Service Menu will now appear.
- Select the items below with ▲ or ▼ key according to the symptoms of Figure 8.

| NO.ITEM | Bit  | NAME  |                  |
|---------|------|-------|------------------|
| 11A     | PAP2 | 7 - 2 | Pin AMP          |
| 11D     | PPH2 | 7 - 2 | Pin Phase        |
| 11F     | ABO2 | 7 - 2 | AFC Bow          |
| 120     | AAN2 | 7 - 2 | AFC Angle        |
| 11B     | UCP2 | 7 - 2 | Upper Corner Pin |
| 11C     | LCP2 | 7 - 2 | Lower Corner Pin |

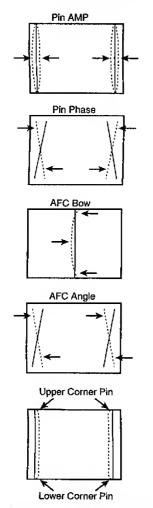


Figure 8. Pincushion Adjustments

Adjust the data with numeric keys for straight vertical lines. To turn off the Service Menu display, press the MENU key.

#### **OSD ADJUSTMENT**

- 1. Connect a color-bar generator to the analog antenna terminal.
- 2. Set the picture controls to the Sports level.
- Turn off the receiver and disconnect the AC power cord. (120V AC line)
- 4. While pressing the VOLUME key, reconnect the AC power cord. The Service Menu display will now appear.
- Select NO. 089 (OSD: On-Screen Display) with ▲ or ▼ key.
- Adjust the + or key for proper position shown in Figure 9. To turn off the Service Menu display, press the MENU key.

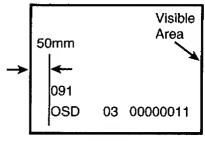
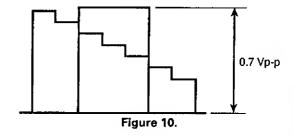


Figure 9.

#### COMPONENTY LEVEL CONFIRM

- Connect a color-bar generator to the analog antenna terminal.
- 2. Switch the generator to the color-bar (NTSC) pattern.
- 3. Connect oscilloscope probe to Connector KG pin 12 and ground on the main board.
- 4. Confirm a reading of 0.7 Vp-p ± .05. See Figure 10.



## **SERVICE HINTS**

#### **POWER FAILURE DETECTOR**

This unit is equipped with a Power Failure Detector function included in the CPU which checks for an abnormal condition in the chassis power supplies, including the power supply derived from the Horizontal Output Transformer.

If, while the power is on, a failure is caused by any of the following that results in a low voltage supply, the CPU will turn the unit off in 1.5 seconds to prevent further damage:

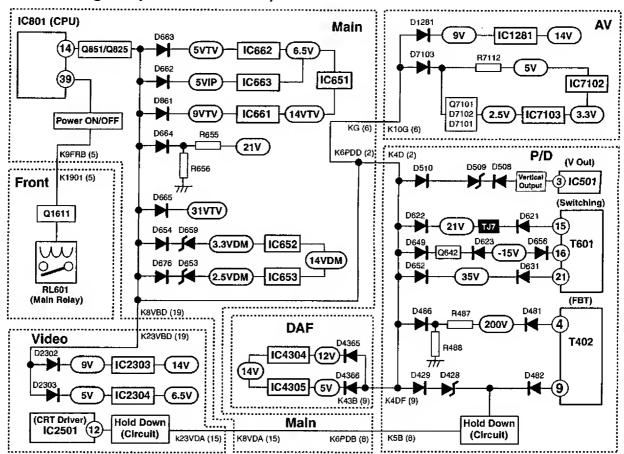
- Failure within the power supply circuits.
- A short circuit in the load side from the supply.
- Stoppage of the Horizontal Output Oscillator caused by the X-Radiation protection Hold-Down Circuit.

If, while the power is off, the power is switched on and any of these failures remains uncorrected, the CPU will shut off the power within three seconds.

Check the following if the unit is turned off by the power failure detector.

- 1. Disconnect the AC power cord (120V AC line) for at least 10 seconds.
- 2. Connect a DC Voltmeter to the circuits shown below.

## **Block Diagram (Power Fail Lines)**



- 3. Press the Power key and check for the proper voltage supplies.
- 4. If any of these voltages is low, the power failure detector should turn the unit off within three seconds.
- 5. Check all circuits shown above.

Note: This unit is equipped with a Power Surge Protection feature included in the CPU. If power failure occurs three times within 15 minutes, the CPU will automatically stop functioning to help prevent secondary damage. (TV will not turn on by pressing the power key.) To reset the operating programs within the CPU, disconnect the AC power cord for at least 10 seconds.

# **MECHANICAL DISASSEMBLIES**

## **CABINET BACK REMOVAL**

- 1. Refer to Figure 1, remove 13 screws.
- 2. Pull off cabinet back and remove.

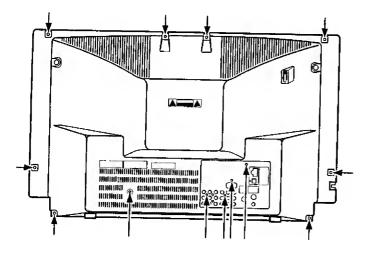


Figure 1. Cabinet Back Removal

## **CHASSIS REMOVAL**

- 1. Remove cabinet back.
- 2. Discharge the picture tube anode (2nd anode lead) to the dag coating (picture tube grounding lead).
- Disconnect degaussing coil socket (KD), picture tube socket, deflection yoke connector (KX), speakers connector (KSP), picture tube ground leads (2), velocity modulation coil connector (K17A) and 2nd anode lead.
- 4. Remove chassis completely by sliding it straight back.

## PICTURE TUBE REMOVAL

CAUTION: Do not disturb the deflection yoke or magnet assembly on the picture tube neck. Care must be taken to keep these assemblies intact, unless picture tube is being replaced. Discharge the picture tube to the coating before handling the tube.

- 1. Remove chassis, referring to Chassis Removal instructions.
- 2. Place cabinet's front face down on a soft surface.
- Remove the screw on each corner of the picture tube and GENTLY lift the picture tube out of the cabinet.
- 4. Install a replacement picture tube in reverse order. Properly install the degaussing coil and picture tube grounding lead on the picture tube. See Figure 2.

Note: If Picture Tube is being replaced, mount the Degaussing Coil properly on the tube. See Figure 2.

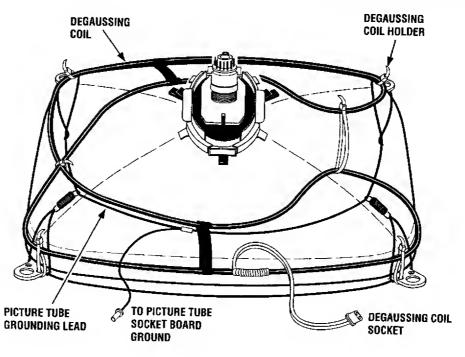


Figure 2. Picture Tube Removal

## CHASSIS ELECTRICAL PARTS LIST

CAUTION: To Protect against electrical shock and for continued product safety, refer to SAFETY PRECAUTIONS, X-RADIATION PRECAUTIONS, HIGH VOLTAGE HOLD-DOWN TEST, and PRODUCT SAFETY NOTICE on Page 2.

#### **PRODUCT SAFETY NOTICE**

PRODUCT SAFETY SHOULD BE CONSIDERED WHEN A REPLACEMENT IS MADE IN ANY AREA OF A RECEIVER. COMPONENTS INDICATED BY A STAR (\*) IN THIS PARTS LIST AND THE SCHEMATIC DIAGRAM DESIGNATE COMPONENTS IN WHICH SAFETY CAN BE OF SPECIAL SIGNIFICANCE. IT IS PARTICULARLY RECOMMENDED THAT ONLY PARTS DESIGNATED ON THE FOLLOWING PARTS LIST BE USED FOR COMPONENT REPLACEMENT DESIGNATED BY A STAR. NO DEVIATIONS FROM RESISTANCE, WATTAGE, AND VOLTAGE RATINGS MAY BE MADE FOR REPLACEMENT ITEMS DESIGNATED BY A STAR.

Notes: Parts having Location Number are located on the following boards.

Numbers 400, 600, Series ......On the Main Board and Power / Deflection Board

Numbers 700 Series ......On the Picture Tube Socket Board

Numbers 900 Series . . . . . . . . . . . . . . . . . Out of Board.

Numbers 1700 Series ......On the Velocity Modulation Board

Numbers 2000 Series . . . . . . . . . . . . . . . On the Video Board

All Other Numbers ......On the Main Board and AV Board

Note: Schematic part location numbers may not always match with the part descriptions.

The part descriptions are correct and should be used.

#### CAPACITORS

50V

#### NOTES:

(Example)

CERAMIC 100P

Read description of the Capacitor as follows:

Κ

#### - Rated Voltage Tolerance Symbols: less than 10PF A . . Not specified B . .±0.1PF C . .±0.25PF D . .±0.5PF F ..±1PF G . .±2PF R . .+0.25 - 0PF S . .+0 - 0.25PF E . .+0 - 1PF more than 10PF A . . Not specified B ..±0.1% C ..±0.25% D . .±0.5% F ..±1% G . .±2% H ..±3%

J . .±5%

L ..±15% M . .±20% N . .±30% P ..+100 - 0% Q ..+30 - 10% T ..+50 - 10% U ..+75 - 10% V ..+20 - 10% W .+100 - 10% X ..+40 - 20%

K ..±10%

Y . .+150 - 10% Z . .+80 - 20% Rated Value: P...Pico Farad U...Micro Farad

Material:

CERAMIC . . . . . Ceramic

MT-PAPER . . . . . Metalized Paper

POLYESTER ...Polyester MT-POLYEST ..Metalized Polyester

POLYPRO .....Polypropylene MT-POLYPRO ..Metalized Polypropylene

COMPO-FILM . . Composite Film MT-COMPO . . . . Metalized Composite

STYRENE .....Styrene

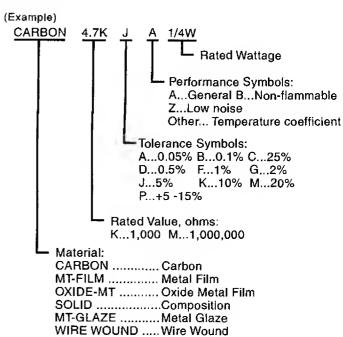
TA-SOLID .....Tantalum Solid AL-SOLID . . . . . Aluminum Solid

ELECT ......Electrolytic

NP-ELECT .....Non-Polarized Electrolytic OS-SOLID .....Aluminum Solid with Organic Semiconductive Electrolytic

#### RESISTORS

Read description of the Resistor as follows:



CERAMIC RES .... Ceramic FUSIBLE RES ..... Fusible

| Schematic<br>Location | Part No.                     | De                | scription       |            | Schematic<br>Location | Part No.                     | D                | escription        |            |
|-----------------------|------------------------------|-------------------|-----------------|------------|-----------------------|------------------------------|------------------|-------------------|------------|
|                       | MAIN PC                      | BOARD             |                 |            | C864                  | 403 235 6203                 | CERAMIC          | 0.01U Z           | Z 50V      |
|                       | 040401705                    |                   |                 |            | C865                  | 404 084 2507                 | ELECT            | 47U N             | ₹ 10V      |
| 0100                  | CAPACITOR                    |                   |                 |            | C866                  | 404 084 3801                 | ELECT            | 1U N              | 1 50V      |
| C100                  | 403 224 6108                 | CERAMIC           | 0.01U K         |            | C867                  | 403 235 6203                 | CERAMIC          | 0.01U Z           | 2 50V      |
| C101                  | 404 084 2408                 | ELECT             | 470U M          | 6.3V       | C871                  | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        |
| C102                  | 403 224 6108                 | CERAMIC           | 0.01U K         | 50V        | C1261                 | 403 279 0106                 | CERAMIC          | 0.1U Z            |            |
| C103                  | 403 235 6203                 | CERAMIC           | 0.01U Z         | 50V        | C1262                 | 404 084 3207                 | ELECT            | 47U M             |            |
| C105                  | 404 084 4303                 | ELECT             | 47U M           | 50V        | C1263                 | 403 279 0106                 | CERAMIC          | 0.1U Z            |            |
| C106                  | 403 224 6108                 | CERAMIC           | 0.01U K         | 50V        | C1264                 | 403 279 0106                 | CERAMIC          | 0.1U Z            |            |
| C489<br>C646          | 404 084 3306<br>404 084 3405 | ELECT             | 470U M          | 16V        | C1265                 | 403 279 0106                 | CERAMIC          | 0.1U Z            |            |
| C648                  |                              | ELECT             | 1000U M         | 25V        | C1266                 | 404 085 5606                 | NP-ELECT         | 22U M             |            |
| C650                  | 403 279 0106<br>404 084 3405 | CERAMIC           | 0.1U Z          | 25V        | C1267                 | 404 085 5606                 | NP-ELECT         | 22U M             |            |
| C651                  | 403 279 0106                 | ELECT<br>CERAMIC  | 1000U M         | 25V        | C1268                 | 404 085 5606                 | NP-ELECT         | 22U M             |            |
| C652                  | 404 084 3405                 | ELECT             | 0.1U Z          | 25V        | C1269                 | 404 084 2804                 | ELECT            | 100U M            |            |
| C653                  | 404 084 3403                 | ELECT             | 1000U M         | 25V        | C1270                 | 404 085 5606                 | NP-ELECT         | 22U M             |            |
| C654                  | 403 260 2003                 |                   | 1000U M         | 10V        | C1273                 | 404 085 5606                 | NP-ELECT         | 22U M             |            |
| C655                  | 403 279 0106                 | MT-COMPO          | 1U J            | 50V        | C1276                 | 404 085 5606                 | NP-ELECT         | 22U M             |            |
| C658                  | 404 087 1804                 | CERAMIC           | 0.1U Z          | 25V        | C1279                 | 404 088 5702                 | ELECT            | 22U M             |            |
| C659                  | 403 260 2003                 | ELECT<br>MT-COMPO | 1000U M         | 10V        | C1292                 | 404 088 5702                 | ELECT            | 22U M             |            |
| C660                  | 404 087 1804                 |                   | 1U J<br>1000U M | 50V        | C1293                 | 404 088 5702                 | ELECT            | 22U M             |            |
| C661                  | 404 084 2804                 | ELECT<br>ELECT    |                 | 10V        | C1294                 | 404 088 5702                 | ELECT            | 22U M             |            |
| C662                  | 404 084 2804                 | ELECT             | 100U M          | 16V        | C1815                 | 403 279 0106                 | CERAMIC          | 0.1U Z            |            |
| C663                  | 403 279 0106                 | CERAMIC           | 100U M          | 16V        | C1851                 | 404 084 3207                 | ELECT            | 47U M             |            |
| C664                  | 404 084 2804                 | ELECT             | 0.1U Z          | 25V        | C1852                 | 403 279 0106                 | CERAMIC          | 0.1U Z            |            |
| C665                  | 404 084 2804                 | ELECT             | 100U M          | 16V        | C1853                 | 403 235 0607                 | CERAMIC          | 100P J            | 50V        |
| C666                  | 403 279 0106                 | CERAMIC           | 100U M          | 16V        | C1854                 | 403 235 0607                 | CERAMIC          | 100P J            | 50V        |
| C671                  | 404 084 2804                 | ELECT             | 0.1U Z          | 25V        | C1855                 | 403 235 0904                 | CERAMIC          | 180P J            | 50V        |
| C672                  | 403 260 2003                 | MT-COMPO          | 100U M<br>1U J  | 16V        | C1857                 | 403 235 1406                 | CERAMIC          | 470P J            | 50V        |
| C801                  | 403 224 5507                 | CERAMIC           | 22P J           | 50V<br>50V | C2801                 | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        |
| C802                  | 403 224 5507                 | CERAMIC           | 22P J           | 50V<br>50V | C2802                 | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        |
| C804                  | 403 235 6203                 | CERAMIC           | 0.01U Z         | 50V        | C2803<br>C2804        | 403 279 0106<br>403 279 0106 | CERAMIC          | 0.1U Z            | 25V        |
| C806                  | 403 235 6203                 | CERAMIC           | 0.01U Z         | 50V        | C2806                 | 404 084 4006                 | CERAMIC          | 0.1U Z            | 25V        |
| C814                  | 403 235 6203                 | CERAMIC           | 0.01U Z         | 50V        | C2807                 | 403 224 6108                 | ELECT<br>CERAMIC | 2.2U M            | 50V        |
| C816                  | 403 235 0003                 | CERAMIC           | 33P J           | 50V        | C2810                 | 404 084 2804                 | ELECT            | 0.01U K<br>100U M | 50V        |
| C818                  | 403 224 5507                 | CERAMIC           | 22P J           | 50V        | C2811                 | 403 279 0106                 | CERAMIC          | 0.1U Z            | 16V<br>25V |
| C821                  | 403 224 5507                 | CERAMIC           | 22P J           | 50V        | C2812                 | 404 084 2804                 | ELECT            | 100U M            |            |
| C822                  | 404 084 2408                 | ELECT             | 470U M          | 6.3V       | C2813                 | 403 279 0106                 | CERAMIC          | 0.1U Z            | 16V<br>25V |
| C823                  | 403 235 6203                 | CERAMIC           | 0.01U Z         | 50V        | C2814                 | 403 279 0106                 | CERAMIC          | 0.10 Z            | 25V<br>25V |
| C824                  | 404 084 3801                 | ELECT             | 1U M            | 50V        | C2825                 | 404 084 3801                 | ELECT            | 1U M              | 50V        |
| C825                  | 403 224 5705                 | CERAMIC           | 1000P K         | 50V        | C2827                 | 404 084 3801                 | ELECT            | 1U M              | 50V        |
| C826                  | 403 235 0706                 | CERAMIC           | 120P J          | 50V        | C2902                 | 404 084 2705                 | ELECT            | 10U M             | 16V        |
| C827                  | 403 235 6203                 | CERAMIC           | 0.01U Z         | 50V        | C2904                 | 404 084 2705                 | ELECT            | 10U M             | 16V        |
| C829                  | 403 235 6203                 | CERAMIC           | 0.01U Z         | 50V        | C2905                 | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        |
| C832                  | 403 224 5507                 | CERAMIC           | 22P J           | 50V        | C2907                 | 404 084 2705                 | ELECT            | 10U M             | 25V<br>16V |
| C833                  | 403 235 0300                 | CERAMIC           | 56P J           | 50V        | C2908                 | 404 084 2804                 | ELECT            | 100U M            | 16V        |
| C834                  | 403 235 0300                 | CERAMIC           | 56P J           | 50V        | C2914                 | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        |
| C835                  | 403 235 0300                 | CERAMIC           | 56P J           | 50V        | C2940                 | 404 084 2705                 | ELECT            | 10U M             | 16V        |
| C836                  | 403 235 0300                 | CERAMIC           | 56P J           | 50V        | C2943                 | 404 084 2705                 | ELECT            | 100 M             | 16V        |
| C837                  | 403 235 4605                 | CERAMIC           | 270P K          | 50V        | C2945                 | 404 084 2705                 | ELECT            | 10U M             | 16V        |
| C840                  | 403 224 5507                 | CERAMIC           | 22P J           | 50V        | C2950                 | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        |
| C841                  | 403 224 5507                 | CERAMIC           | 22P J           | 50V        | C2951                 | 404 084 2804                 | ELECT            | 100U M            | 16V        |
| C842                  | 403 224 5507                 | CERAMIC           | 22P J           | 50V        | C2952                 | 404 085 5606                 | NP-ELECT         | 22U M             | 16V        |
| C844                  | 403 224 5804                 | CERAMIC           | 2200P K         | 50V        | C2954                 | 404 085 5606                 | NP-ELECT         | 22U M             | 16V        |
| C852                  | 403 235 1000                 | CERAMIC           | 220P J          | 50V        | C2956                 | 404 085 5606                 | NP-ELECT         | 22U M             |            |
| C854                  | 403 155 4600                 | CERAMIC           | 4P C            | 50V        | C3243                 | 404 087 1200                 | ELECT            | 0.1U M            | 16V<br>50V |
| C855                  | 403 155 4600                 | CERAMIC           | 4P C            | 50V        | C3401                 | 404 089 6500                 | NP-ELECT         | 4.7U M            | 50V<br>50V |
| C856                  | 403 155 4600                 | CERAMIC           | 4P C            | 50V        |                       | 404 084 3801                 | ELECT            | 4.70 M            | 50V<br>50V |
|                       | 403 235 6203                 | CERAMIC           | 0.01U Z         | 50V        |                       | 404 084 3801                 | ELECT            |                   | 50V<br>50V |
| C862                  | 400 200 0200                 | OLIMBIIO          | 0.01117         | . 11.111   | 14.34411.3            |                              | F1 F1 '1         | 1U M -            | 5011       |

| Schematic<br>Location | Part No.                     | Des            | scription        |                  | Schematic<br>Location | Part No.      | Description               |
|-----------------------|------------------------------|----------------|------------------|------------------|-----------------------|---------------|---------------------------|
| C3406                 | 403 343 4603                 | CERAMIC        | 0.022U K         | 50V              | D672                  | 407 223 5209  | DIODE RK46 015-304        |
| C3407                 | 403 224 5804                 | CERAMIC        | 2200P K          | 50V              | D676                  | 407 012 4406  | DIODE 188133              |
| C3408                 | 404 087 1200                 | ELECT          | 0.1U M           | 50V              | D801                  | 407 206 5608  | ZENER DIODE UDZS10B TE-1  |
| C3409                 | 404 084 4204                 | ELECT          | 4.7U M           | 50V              | D805                  | 407 206 5608  | ZENER DIODE UDZ\$10B TE-1 |
| C3410                 | 404 084 3900                 | ELECT          | 10U M            | 50V              | D809                  | 407 206 5608  | ZENER DIODE UDZS10B TE-1  |
| C3411                 | 404 084 3801                 | ELECT          | 1U M             | 50V              | D810                  | 407 206 5608  | ZENER DIODE UDZS10B TE-1  |
| C3412                 | 404 084 3801                 | ELECT          | 1U M             | 50V              | D812                  | 407 206 6308  | ZENER DIODE UDZS5.1B TE-1 |
| C3415                 | 404 084 2903                 | ELECT 1        | 000U M           | 16V              | D816                  | 407 206 5608  | ZENER DIODE UDZS10B TE-1  |
| C3416                 | 404 084 3306                 | ELECT          | 470U M           | 16V              | D822                  | 407 206 5608  | ZENER DIODE UDZS10B TE-1  |
| C3417                 | 404 084 3801                 | ELECT          | 1U M             | 50V              | D825                  | 407 206 5608  | ZENER DIODE UDZS10B TE-1  |
| C3418                 | 404 084 3801                 | ELECT          | 1U M             | 50V              | D826                  | 407 149 0807  | DIODE 1SS355 TE-17        |
| C3419                 | 404 084 3801                 | ELECT          | 1U M             | 50V              | D827                  | 407 206 5608  | ZENER DIODE UDZS108 TE-1  |
| C3420                 | 404 084 5607                 | MT-POLYES      |                  | 63V              | D828                  | 407 206 5608  | ZENER DIODE UDZS108 TE-1  |
| C3420                 | 403 260 2904                 | MT-COMPO       | 0.33U J          | 50V              | D835                  | 407 221 7106  | ZENER DIODE UDZS-TE-1712  |
| C3421                 | 404 084 3900                 | ELECT          | 10U M            | 50V              | D836                  | 407 221 7106  | ZENER DIODE UDZS-TE-1712  |
| C3422                 | 404 084 4204                 | ELECT          | 4.7U M           | 50V              | D837                  | 407 206 5608  | ZENER DIODE UDZS10B TE-1  |
| C3424                 | 403 224 5804                 | CERAMIC        | 2200P K          | 50V              | D838                  | 407 206 5608  | ZENER DIODE UDZS10B TE-1  |
| C3425                 | 404 084 3801                 | ELECT          | 1U M             | 50V              | D839                  | 407 206 5608  | ZENER DIODE UDZS108 TE-1  |
| C3427                 | 404 084 3801                 | ELECT          | 1U M             | 50V              | D840                  | 407 206 5608  | ZENER DIODE UDZS10B TE-1  |
| C3428                 | 404 084 3801                 | ELECT          | 1U M             | 50V              | D841                  | 407 206 5608  | ZENER DIODE UDZS10B TE-1  |
| C3429                 | 404 084 3801                 | ELECT          | 1U M             | 50V              | D842                  | 407 206 5608  | ZENER DIODE UDZS10B TE-1  |
| C3430                 | 404 089 6500                 | NP-ELECT       | 4.7U M           | 50V              | D857                  | 407 209 1201  | ZENER DIODE UDZS6.2B TE-1 |
| C3435                 | 404 091 6604                 | ELECT          | 4.7U M           | 25V              | D858                  | 407 012 4406  | DIODE 1SS133              |
| C3437                 | 404 091 6604                 | ELECT          | 4.7U M           | 25V              | D871                  | 407 206 5608  | ZENER DIODE UDZS10B TE-1  |
| C3606                 | 404 089 6500                 | NP-ELECT       | 4.7U M           | 50V              | D896                  | 407 206 5608  | ZENER DIODE UDZS10B TE-1  |
| C3608                 | 403 235 5701                 | CERAMIC        | 5600P K          | 50V              | D897                  | 407 206 5608  | ZENER DIODE UDZS10B TE-1  |
| C3609                 | 403 325 2504                 | CERAMIC        | 0.012U K         | 50V              | D898                  | 407 206 5608  | ZENER DIODE UDZS10B TE-1  |
| C3610                 | 404 084 3702                 | ELECT O        | .47U M           | 50V              | D899                  | 407 206 5608  | ZENER DIODE UDZS10B TE-17 |
| C3611<br>C3612        | 404 084 3702                 | ELECT 0        | .47U M           | 50V              | D1280                 | 407 012 4406  | DIODE 1SS133              |
|                       | 404 084 3207                 | ELECT          | 47U M            | 16V              | D1282                 | 407 012 4406  | DIODE 188133              |
| C3613<br>C3615        | 403 235 1307<br>404 091 6604 | CERAMIC        | 390P J           | 50V              | D3401                 | 407 092 9526  | DIODE SB07-03C-TB         |
| C3616                 | 404 084 3306                 | ELECT<br>ELECT | 4.7U M<br>470U M | 25V<br>16V       | D3413                 | 407 206 5608  | ZENER DIODE UDZS108 TE-17 |
| C3617                 | 404 089 6500                 | NP-ELECT       | 4700 M           |                  | D3414                 | 407 206 5608  | ZENER DIODE UDZS10B TE-17 |
| C3618                 | 404 084 2903                 | ELECT          | 1000U M          | 50V<br>16V       | D3416                 | 407 221 7106  | ZENER DIODE UDZS-TE-1712  |
| C3619                 | 404 091 6604                 | ELECT          | 4.7U M           | 25V              | D3617                 | 407 092 9526  | DIODE SB07-03C-TB         |
| C3620                 | 404 089 6500                 | NP-ELECT       | 4.70 M           | 20V<br>50V       |                       | INTEGRATED    | CIRCUITS                  |
| C3622                 | 403 224 5606                 | CERAMIC        | 2700P K          | 50V<br>50V       | IC651                 | 410 401 0002  | IC SI-8050SS LF1113       |
| C3623                 | 403 323 3602                 | CERAMIC        | 0.047U K         | 50V<br>50V       | IC652                 | 409 503 7507  | IC PQ1CG3032FZ            |
| C3624                 | 403 342 9203                 | TA-SOLID       | 3.3U K           |                  | IC653                 | 409 503 7507  | IC PQ1CG3032FZ            |
| C3626                 | 404 089 6500                 | NP-ELECT       | 4.7U M           | 10V<br>50V       | IC661                 | 410 401 0101  | IC SI-3090FA LF1113       |
| C3627                 | 403 299 1820                 | TA-SOLID       | 10U K            | 10V              | IC662                 | 410 330 6007  | IC SI-3050FA LF1113       |
| C3628                 | 404 084 3801                 | ELECT          | 1U M             | 50V              | IC801                 | 410 495 8106  | IC M37151M*-***FP         |
| C3629                 | 404 089 6500                 | NP-ELECT       | 4.7U M           | 50V              | IC802                 | 409 301 2803  | IC MN1381-Q               |
| C3630                 | 404 089 6500                 | NP-ELECT       | 4.70 M<br>4.70 M | 50V<br>50V       | IC803                 | 409 495 7103  | IC CAT24WC08P             |
| C3631                 | 404 085 5606                 | NP-ELECT       | 22U M            | 16V              | 10000                 | 409 383 6805  | IC 24LC08B/P              |
| C5506                 | 403 279 0106                 | CERAMIC        | 0.1U Z           | 25V              | IC804                 | 409 400 2704  | IC TC7SET08F-TE85L        |
| C5507                 | 404 084 3801                 | ELECT          | 1U M             | 50V              | IC1261                | 409 444 4722  | IC NJM2534M-TE2           |
| 00001                 | 1000 700 1                   | LLLOI          | I O IVI          | J0 v             | IC1262                | 409 444 4722  | IC NJM2534M-TE2           |
|                       | DIODES                       |                |                  |                  | IC1263                | 409 444 4722  | IC NJM2534M-TE2           |
| D101                  | 407 221 7106                 | ZENER DIODI    | UDZS-TE-         | 1712B            | IC1264                | 409 264 6009  | IC NJM2268M               |
| D651                  | 407 223 5209                 | DIODE RK46     |                  |                  | IC1851                | 409 223 1809  | IC MC74HC04AF             |
| D653                  | 407 224 4706                 | ZENER DIODI    |                  | TPH3             | IC2801                | 409 523 5002  | IC TA1318AF               |
| D654                  | 407 012 4406                 | DIODE 1SS13    |                  | , · <del>-</del> | IC2903                | 409 051 2722  | IC TC4052BF-EL            |
| D655                  | 407 223 5209                 | DIODE RK46     |                  |                  | IC3401                | 409 564 4309  | IC NJW1142M               |
| D659                  | 407 224 4706                 | ZENER DIODE    |                  | TPH3             | IC3601                | 409 572 2205  | IC CXA2104S               |
| D661                  | 407 012 4406                 | DIODE 1SS13    |                  |                  | IC5506                | 409 074 9623  | IC M51957BFP              |
| D663                  | 407 012 4406                 | DIODE 18813    |                  |                  | 100000                | 100 01 1 0020 | , o mo roor bit           |
| _ ~ ~ ~               |                              |                |                  |                  |                       |               |                           |
| D664                  | 407 012 4406                 | DIODE 18813    | 3                |                  |                       |               |                           |

| Schematic<br>Location | Part No.     | Description         | Schematic<br>Location | Part No.                     | Description        |
|-----------------------|--------------|---------------------|-----------------------|------------------------------|--------------------|
|                       | COILS        |                     |                       | 405 173 9902                 | TR 2SC3928A1S      |
| L001                  | 645 008 2894 | INDUCTOR, 5.6U K    | Q1293                 | 405 014 4509                 | TR 2SC2412K-T-96-R |
|                       | 645 016 3104 | INDUCTOR, 5.6U K    | 4.200                 | 405 014 4608                 | TR 2SC2412K-T-96-S |
| L101                  | 645 008 2894 | INDUCTOR, 5.6U K    |                       | 405 015 8724                 | TR 2SC2812-L6-TB   |
|                       | 645 016 3104 | INDUCTOR, 5.6U K    |                       | 405 015 8922                 |                    |
| L651                  | 645 045 9436 | INDUCTOR, 330U K    |                       | 405 163 1602                 | TR 2SC2812-L7-TB   |
| L652                  | 645 049 3751 | INDUCTOR, 47UH K    |                       | 405 163 1701                 | TR 2SC2812N-L6-TB  |
| L653                  | 645 047 6655 | INDUCTOR, 33U K     |                       |                              | TR 2SC2812N-L7-TB  |
| L654                  | 645 047 6655 | INDUCTOR, 33U K     |                       | 405 173 9803                 | TR 2SC3928A1R      |
| L661                  | 645 049 3751 | INDUCTOR, 47UH K    | 01005                 | 405 173 9902                 | TR 2SC3928A1S      |
| L801                  | 645 008 2894 | INDUCTOR, 5.6U K    | Q1295                 | 405 014 4509                 | TR 2SC2412K-T-96-R |
| 2001                  | 645 016 3104 | INDUCTOR, 5.6U K    |                       | 405 014 4608                 | TR 2SC2412K-T-96-S |
| L802                  | 645 008 2894 | INDUCTOR, 5.6U K    |                       | 405 015 8724                 | TR 2SC2812-L6-TB   |
| LOUZ                  | 645 016 3104 |                     |                       | 405 015 8922                 | TR 2SC2812-L7-TB   |
| L803                  |              | INDUCTOR, 5.6U K    |                       | 405 163 1602                 | TR 2SC2812N-L6-TB  |
| LOUS                  | 645 008 2894 | INDUCTOR, 5.6U K    |                       | 405 163 1701                 | TR 2SC2812N-L7-TB  |
| 1.004                 | 645 016 3104 | INDUCTOR, 5.6U K    |                       | 405 173 9803                 | TR 2SC3928A1R      |
| L804                  | 645 008 2894 | INDUCTOR, 5.6U K    |                       | 405 173 9902                 | TR 2SC3928A1S      |
| 1.044                 | 645 016 3104 | INDUCTOR, 5.6U K    | Q1297                 | 405 014 4509                 | TR 2SC2412K-T-96-R |
| L811                  | 645 006 2490 | INDUCTOR, 1U K      |                       | 405 014 4608                 | TR 2SC2412K-T-96-S |
|                       | 645 016 2411 | INDUCTOR, 1U K      |                       | 405 015 8724                 | TR 2SC2812-L6-TB   |
| L837                  | 645 006 2490 | INDUCTOR, 1U K      |                       | 405 015 8922                 | TR 2SC2812-L7-TB   |
|                       | 645 016 2411 | INDUCTOR, 1U K      |                       | 405 163 1602                 | TR 2SC2812N-L6-TB  |
| L1851                 | 645 008 2894 | INDUCTOR, 5.6U K    |                       | 405 163 1701                 | TR 2SC2812N-L7-TB  |
|                       | 645 016 3104 | INDUCTOR, 5.6U K    |                       | 405 173 9803                 | TR 2SC3928A1R      |
|                       |              |                     |                       | 405 173 9902                 | TR 2SC3928A1S      |
|                       | TRANSISTO    | RS                  | Q2902                 | 405 014 4509                 | TR 2SC2412K-T-96-R |
| Q825                  | 405 134 5925 | TR 2SA1037AK T146 R | QE COZ                | 405 014 4608                 | TR 2SC2412K-T-96-S |
|                       | 405 147 2205 | TR 2SA1037AK T146 S |                       | 405 015 8724                 | TR 2SC2812-L6-TB   |
|                       | 405 002 0308 | TR 2SA1037K-T-96-R  |                       | 405 015 8922                 |                    |
|                       | 405 002 0407 | TR 2SA1037K-T-96-S  |                       | 405 013 8922                 | TR 2SC2812-L7-TB   |
|                       | 405 002 6726 | TR 2SA1179-M6       |                       |                              | TR 2SC2812N-L6-TB  |
|                       | 405 002 6924 | TR 2SA1179-M7-TB    |                       | 405 163 1701<br>405 173 9803 | TR 2SC2812N-L7-TB  |
|                       | 405 163 1503 | TR 2SA1179N-M6-TB   |                       | 405 173 9803                 | TR 2SC3928A1R      |
|                       | 405 163 2708 | TR 2SA1179N-M7-TB   | Q2903                 |                              | TR 2SC3928A1S      |
|                       | 405 173 9605 | TR 2SA1235A1E       | Q2300                 | 405 014 4509                 | TR 2SC2412K-T-96-R |
|                       | 405 173 9704 | TR 2SA1235A1F       |                       | 405 014 4608                 | TR 2SC2412K-T-96-S |
| Q851                  | 405 014 4509 | TR 2SC2412K-T-96-R  |                       | 405 015 8724                 | TR 2SC2812-L6-TB   |
|                       | 405 014 4608 | TR 2SC2412K-T-96-S  |                       | 405 015 8922                 | TR 2SC2812-L7-TB   |
|                       | 405 015 8724 | TR 2SC2812-L6-TB    |                       | 405 163 1602                 | TR 2SC2812N-L6-TB  |
|                       | 405 015 8922 | TR 2SC2812-L7-TB    |                       | 405 163 1701                 | TR 2SC2812N-L7-TB  |
|                       | 405 163 1602 | TR 2SC2812N-L6-TB   |                       | 405 173 9803                 | TR 2SC3928A1R      |
|                       | 405 163 1701 | TR 2SC2812N-L7-TB   | 00004                 | 405 173 9902                 | TR 2SC3928A1S      |
|                       | 405 173 9803 | TR 2SC3928A1R       | Q2904                 | 405 014 4509                 | TR 2SC2412K-T-96-R |
|                       | 405 173 9902 | TR 2SC3928A1S       |                       | 405 014 4608                 | TR 2SC2412K-T-96-S |
| Q1280                 | 405 014 4509 | TR 2SC2412K-T-96-R  |                       | 405 015 8724                 | TR 2SC2812-L6-TB   |
| Q1200                 | 405 014 4608 |                     |                       | 405 015 8922                 | TR 2SC2812-L7-TB   |
|                       |              | TR 2SC2412K-T-96-S  |                       | 405 163 1602                 | TR 2SC2812N-L6-TB  |
|                       | 405 015 8724 | TR 2SC2812-L6-TB    |                       | 405 163 1701                 | TR 2SC2812N-L7-TB  |
|                       | 405 015 8922 | TR 2SC2812-L7-TB    |                       | 405 173 9803                 | TR 2SC3928A1R      |
|                       | 405 163 1602 | TR 2SC2812N-L6-TB   |                       | 405 173 9902                 | TR 2SC3928A1S      |
|                       | 405 163 1701 | TR 2SC2812N-L7-TB   | Q2906                 | 405 014 4509                 | TR 2SC2412K-T-96-R |
|                       | 405 173 9803 | TR 2SC3928A1R       |                       | 405 014 4608                 | TR 2SC2412K-T-96-S |
|                       | 405 173 9902 | TR 2SC3928A1S       |                       | 405 015 8724                 | TR 2SC2812-L6-TB   |
|                       |              |                     |                       | 405 015 8922                 | TR 2SC2812-L7-TB   |
| Q1281                 | 405 014 4509 | TR 2SC2412K-T-96-R  |                       | 405 163 1602                 | TR 2SC2812N-L6-TB  |
|                       | 405 014 4608 | TR 2SC2412K-T-96-S  |                       | 405 163 1701                 | TR 2SC2812N-L7-TB  |
|                       | 405 015 8724 | TR 2SC2812-L6-TB    |                       | 405 173 9803                 | TR 2502812N-L7-1B  |
|                       | 405 015 8922 | TR 2SC2812-L7-TB    |                       | 405 173 9803                 |                    |
|                       | 405 163 1602 | TR 2SC2812N-L6-TB   | 02910                 |                              | TR 2SC3928A1S      |
|                       | 405 163 1701 | TR 2SC2812N-L7-TB   | UZJIV                 | 405 014 4509                 | TR 2SC2412K-T-96-R |
|                       | 405 173 9803 | TR 2SC3928A1R       |                       | 405 014 4608                 | TR 2SC2412K-T-96-S |
|                       |              | 200020/1111         |                       | 405 015 8724                 | TR 2SC2812-L6-TB   |

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| Schematic<br>Location | Part No.                     | Description                              | Schematic<br>Location | Part No.                     | De                 | scription                   |
|-----------------------|------------------------------|--|-----------------------|------------------------------|--------------------|-----------------------------|
| Q2910 (Coi            | nt.)405 015 8922             | TR 2SC2812-L7-TB                         |                       | 405 173 9902                 | TR 2SC392          | 8A1S                        |
| •                     | 405 163 1602                 | TR 2SC2812N-L6-TB                        | Q5501                 | 405 014 4509                 | TR 2SC241          |                             |
|                       | 405 163 1701                 | TR 2SC2812N-L7-TB                        |                       | 405 014 4608                 | TR 2SC241          | 2K-T-96-S                   |
|                       | 405 173 9803                 | TR 2SC3928A1R                            |                       | 405 015 8724                 | TR 2SC281          | 2-L6- <b>T</b> B            |
|                       | 405 173 9902                 | TR 2SC3928A1S                            |                       | 405 015 8922                 | TR 2SC281          | 2-L7- <b>T</b> B            |
| Q2942                 | 405 014 4509                 | TR 2SC2412K-T-96-R                       |                       | 405 163 1602                 | TR 2SC281:         | 2N-L6-TB                    |
|                       | 405 014 4608                 | TR 2SC2412K-T-96-S                       |                       | 405 163 1701                 | TR 2SC281:         | 2N-L7-TB                    |
|                       | 405 015 8724                 | TR 2SC2812-L6-TB                         |                       | 405 173 9803                 | TR 2SC392          |                             |
|                       | 405 015 8922                 | TR 2SC2812-L7-TB                         |                       | 405 173 9902                 | TR 2SC392          | 8A1S                        |
|                       | 405 163 1602                 | TR 2SC2812N-L6-TB                        | Q5502                 | 405 014 4509                 | TR 2SC241:         |                             |
|                       | 405 163 1701                 | TR 2SC2812N-L7-TB                        |                       | 405 014 4608                 | TR 2SC241:         |                             |
|                       | 405 173 9803                 | TR 2SC3928A1R                            |                       | 405 015 8724                 | TR 2SC281:         |                             |
|                       | 405 173 9902                 | TR 2SC3928A1S                            |                       | 405 015 8922                 | TR 2SC281          |                             |
| Q2943                 | 405 014 4509                 | TR 2SC2412K-T-96-R                       |                       | 405 163 1602                 | TR 2SC281:         |                             |
|                       | 405 014 4608                 | TR 2SC2412K-T-96-S                       |                       | 405 163 1701                 | TR 2SC281          |                             |
|                       | 405 015 8724                 | TR 2SC2812-L6-TB                         |                       | 405 173 9803                 | TR 2SC392          |                             |
|                       | 405 015 8922                 | TR 2SC2812-L7-TB                         |                       | 405 173 9902                 | TR 2SC3928         | BA1S                        |
|                       | 405 163 1602                 | TR 2SC2812N-L6-TB                        |                       | DECICEORO                    |                    |                             |
|                       | 405 163 1701                 | TR 2SC2812N-L7-TB                        | D404                  | RESISTORS                    | CARRON             | 100 15 1/04/                |
|                       | 405 173 9803                 | TR 2SC3928A1R                            | R101                  | 401 024 6700                 | CARBON             | 100 JA 1/6W                 |
| 22252                 | 405 173 9902                 | TR 2SC3928A1S                            | R102                  | 401 024 6700                 | CARBON             | 100 JA 1/6W                 |
| Q2950                 | 405 014 4509                 | TR 2SC2412K-T-96-R                       | R103                  | 401 026 0607                 | CARBON             | 270 JA 1/6W                 |
|                       | 405 014 4608                 | TR 2SC2412K-T-96-S                       | R104                  | 401 026 9907                 | CARBON             | 4.7K JA 1/6W                |
|                       | 405 015 8724                 | TR 2SC2812-L6-TB                         | R106<br>R634          | 401 024 6700                 | CARBON<br>MT-GLAZE | 100 JA 1/6W<br>680 JA 1/10W |
|                       | 405 015 8922                 | TR 2SC2812-L7-TB                         | R650                  | 401 256 6905<br>401 256 6905 | MT-GLAZE           | 680 JA 1/10W                |
|                       | 405 163 1602                 | TR 2SC2812N-L6-TB                        | R651                  | 401 256 2907                 | MT-GLAZE           | 150 JA 1/10W                |
|                       | 405 163 1701                 | TR 2SC2812N-L7-TB                        | R652                  | 401 162 4002                 | MT-GLAZE           | 560 JA 1/10W                |
|                       | 405 173 9803                 | TR 2SC3928A1R                            | R653                  | 401 162 4002                 | MT-GLAZE           | 1.2K JA 1/10W               |
| Q3410                 | 405 173 9902                 | TR 2SC3928A1S                            | R654                  | 401 256 3706                 | MT-GLAZE           | 750 JA 1/10W                |
| Q3410                 | 405 014 4509<br>405 014 4608 | TR 2SC2412K-T-96-R<br>TR 2SC2412K-T-96-S | R655                  | 401 162 3104                 | MT-GLAZE           | 3.3K JA 1/10W               |
|                       | 405 015 8724                 | TR 2SC2812-L6-TB                         | R656                  | 401 150 6100                 | MT-GLAZE           | 2.2K JA 1/10W               |
|                       | 405 015 8922                 | TR 2SC2812-L7-TB                         | R659                  | 401 150 6001                 | MT-GLAZE           | 0.000 ZA 1/10W              |
|                       | 405 163 1602                 | TR 2SC2812N-L6-TB                        | ★ R663                | 401 069 0404                 | OXIDE-MT           | 6.8 JA 2W                   |
|                       | 405 163 1701                 | TR 2SC2812N-L7-TB                        | R665                  | 401 150 6209                 | MT-GLAZE           | 1K JA 1/10W                 |
|                       | 405 173 9803                 | TR 2SC3928A1R                            | ★ R666                | 401 111 3100                 | OXIDE-MT           | 0.82 JA 2W                  |
| •                     | 405 173 9902                 | TR 2SC3928A1S                            | R676                  | 401 150 6209                 | MT-GLAZE           | 1K JA 1/10W                 |
| Q3420                 | 405 014 4509                 | TR 2SC2412K-T-96-R                       | R801                  | 401 162 4101                 | MT-GLAZE           | 5.6K JA 1/10W               |
| 40.20                 | 405 014 4608                 | TR 2SC2412K-T-96-S                       | R802                  | 401 150 5905                 | MT-GLAZE           | 10K JA 1/10W                |
|                       | 405 015 8724                 | TR 2SC2812-L6-TB                         | R803                  | 401 150 6001                 | MT-GLAZE           | 0.000 ZA 1/10W              |
|                       | 405 015 8922                 | TR 2SC2812-L7-TB                         | R804                  | 401 255 6500                 | MT-GLAZE           | 100 JA 1/10W                |
|                       | 405 163 1602                 | TR 2SC2812N-L6-TB                        | R805                  | 401 024 6700                 | CARBON             | 100 JA 1/6W                 |
|                       | 405 163 1701                 | TR 2SC2812N-L7-TB                        | R806                  | 401 255 6500                 | MT-GLAZE           | 100 JA 1/10W                |
|                       | 405 173 9803                 | TR 2SC3928A1R                            | R807                  | 401 024 6700                 | CARBON             | 100 JA 1/6W                 |
|                       | 405 173 9902                 | TR 2SC3928A1S                            | R809                  | 401 024 6700                 | CARBON             | 100 JA 1/6W                 |
| Q3457                 | 405 014 4509                 | TR 2SC2412K-T-96-R                       | R810                  | 401 162 3708                 | MT-GLAZE           | 4.7K JA 1/10W               |
|                       | 405 014 4608                 | TR 2SC2412K-T-96-S                       | R811                  | 401 150 5905                 | MT-GLAZE           | 10K JA 1/10W                |
|                       | 405 015 8724                 | TR 2SC2812-L6-TB                         | R812                  | 401 024 7004                 | CARBON             | 1K JA 1/6W                  |
|                       | 405 015 8922                 | TR 2SC2812-L7-TB                         | R814                  | 401 255 6500                 | MT-GLAZE           | 100 JA 1/10W                |
|                       | 405 163 1602                 | TR 2SC2812N-L6-TB                        | R815                  | 401 150 6209                 | MT-GLAZE           | 1K JA 1/10W                 |
|                       | 405 163 1701                 | TR 2SC2812N-L7-TB                        | R816                  | 401 024 6700                 | CARBON             | 100 JA 1/6W                 |
|                       | 405 173 9803                 | TR 2SC3928A1R                            | R817                  | 401 024 6700                 | CARBON             | 100 JA 1/6W                 |
|                       | 405 173 9902                 | TR 2SC3928A1S                            | R823                  | 401 150 5905                 | MT-GLAZE           | 10K JA 1/10W                |
| Q3459                 | 405 014 4509                 | TR 2SC2412K-T-96-R                       | R824                  | 401 024 7004                 | CARBON             | 1K JA 1/6W                  |
|                       | 405 014 4608                 | TR 2SC2412K-T-96-S                       | R826                  | 401 025 7805                 | CARBON             | 2.2K JA 1/6W                |
|                       | 405 015 8724                 | TR 2SC2812-L6-TB                         | R827                  | 401 255 6500                 | MT-GLAZE           | 100 JA 1/10W                |
|                       | 405 015 8922                 | TR 2SC2812-L7-TB                         | R828                  | 401 150 5905                 | MT-GLAZE           | 10K JA 1/10W                |
|                       | 405 163 1602                 | TR 2SC2812N-L6-TB                        | R829                  | 401 255 6500                 | MT-GLAZE           | 100 JA 1/10W                |
|                       | 405 163 1701                 | TR 2SC2812N-L7-TB                        | R830                  | 401 150 5806                 | MT-GLAZE           | 100K JA 1/10W               |
|                       | 405 173 9803                 | TR 2SC3928A1R                            | R831                  | 401 150 5806                 | MT-GLAZE           | 100K JA 1/10W               |

| Cahamati-             |                              | 7                    | , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |                       |                              | 1                    |                              |
|-----------------------|------------------------------|----------------------|---|-----------------------|------------------------------|----------------------|------------------------------|
| Schematic<br>Location | Part No.                     | Des                  | cription                                | Schematic<br>Location | Part No.                     | Des                  | scription                    |
| R833                  | 401 256 3805                 | MT-GLAZE             | 1.5K JA 1/10W                           | R1296                 | 401 256 7209                 | MT-GLAZE             | 18K JA 1/10W                 |
| R834                  | 401 162 3708                 | MT-GLAZE             | 4.7K JA 1/10W                           | R1297                 | 401 256 4109                 | MT-GLAZE             | 56 JA 1/10W                  |
| R835                  | 401 162 3708                 | MT-GLAZE             | 4.7K JA 1/10W                           | R1298                 | 401 150 6209                 | MT-GLAZE             | 1K JA 1/10W                  |
| R836                  | 401 162 3708                 | MT-GLAZE             | 4.7K JA 1/10W                           | R1299                 | 401 256 4109                 | MT-GLAZE             | 56 JA 1/10W                  |
| R837                  | 401 024 7400                 | CARBON               | 10K JA 1/6W                             | R1851                 | 401 025 4606                 | CARBON               | 18K JA 1/6W                  |
| R838                  | 401 024 6700                 | CARBON               | 100 JA 1/6W                             | R1852                 | 401 162 3104                 | MT-GLAZE             | 3.3K JA 1/10W                |
| R839                  | 401 162 3708                 | MT-GLAZE             | 4.7K JA 1/10W                           | R1855                 | 401 256 3607                 | MT-GLAZE             | 15K JA 1/10W                 |
| R840                  | 401 150 5905                 | MT-GLAZE             | 10K JA 1/10W                            | R1856                 | 401 256 7209                 | MT-GLAZE             | 18K JA 1/10W                 |
| R841                  | 401 162 4101                 | MT-GLAZE             | 5.6K JA 1/10W                           | R1857                 | 401 256 6608                 | MT-GLAZE             | 68K JA 1/10W                 |
| R842                  | 401 150 5905                 | MT-GLAZE             | 10K JA 1/10W                            | R2807                 | 401 162 4101                 | MT-GLAZE             | 5.6K JA 1/10W                |
| R843                  | 401 024 6700                 | CARBON               | 100 JA 1/6W                             | R2809                 | 401 256 4901                 | MT-GLAZE             | 360 JA 1/10W                 |
| R844                  | 401 024 6700                 | CARBON               | 100 JA 1/6W                             | R2811                 | 401 150 6001                 | MT-GLAZE             | 0.000 ZA 1/10W               |
| R845                  | 401 024 6700                 | CARBON               | 100 JA 1/6W                             | R2815                 | 401 024 6700                 | CARBON               | 100 JA 1/6W                  |
| R846                  | 401 162 3708                 | MT-GLAZE             | 4.7K JA 1/10W                           | R2816                 | 401 150 5905                 | MT-GLAZE             | 10K JA 1/10W                 |
| R849                  | 401 162 3708                 | MT-GLAZE             | 4.7K JA 1/10W                           | R2819                 | 401 150 5905                 | MT-GLAZE             | 10K JA 1/10W                 |
| R851                  | 401 150 5905                 | MT-GLAZE             | 10K JA 1/10W                            | R2820                 | 401 024 6700                 | CARBON               | 100 JA 1/6W                  |
| R852                  | 401 256 6301                 | MT-GLAZE             | 47K JA 1/10W                            | R2821                 | 401 255 6500                 | MT-GLAZE             | 100 JA 1/10W                 |
| R853                  | 401 256 6301                 | MT-GLAZE             | 47K JA 1/10W                            | R2822                 | 401 255 6500                 | MT-GLAZE             | 100 JA 1/10W                 |
| R854                  | 401 162 3708                 | MT-GLAZE             | 4.7K JA 1/10W                           | R2824                 | 401 150 6001                 | MT-GLAZE             | 0.000 ZA 1/10W               |
| R855                  | 401 162 4101                 | MT-GLAZE             | 5.6K JA 1/10W                           | R2827                 | 401 024 6700                 | CARBON               | 100 JA 1/6W                  |
| R856                  | 401 162 4101                 | MT-GLAZE             | 5.6K JA 1/10W                           | R2828                 | 401 150 5905                 | MT-GLAZE             | 10K JA 1/10W                 |
| R866                  | 401 255 6005                 | MT-GLAZE             | 1M JA 1/10W                             | R2829                 | 401 150 5905                 | MT-GLAZE             | 10K JA 1/10W                 |
| R876<br>R880          | 401 024 7004                 | CARBON               | 1K JA 1/6W                              | R2830                 | 401 024 6700                 | CARBON               | 100 JA 1/6W                  |
| R881                  | 401 256 7308<br>401 256 7308 | MT-GLAZE<br>MT-GLAZE | 6.8K JA 1/10W                           | R2901                 | 401 150 6100                 | MT-GLAZE             | 2.2K JA 1/10W                |
| R883                  | 401 256 7308                 |                      | 6.8K JA 1/10W<br>6.8K JA 1/10W          | R2902                 | 401 150 5905                 | MT-GLAZE             | 10K JA 1/10W                 |
| R886                  | 401 250 7508                 | MT-GLAZE<br>MT-GLAZE | 10K JA 1/10W                            | R2903                 | 401 024 7004                 | CARBON               | 1K JA 1/6W                   |
| R887                  | 401 150 5905                 | MT-GLAZE             | 10K JA 1/10W                            | R2904                 | 401 150 5905                 | MT-GLAZE             | 10K JA 1/10W                 |
| R894                  | 401 150 5905                 | MT-GLAZE             | 1K JA 1/10W                             | R2906<br>R2907        | 401 026 9303<br>401 256 0408 | CARBON               | 47 JA 1/6W                   |
| R895                  | 401 024 7004                 | CARBON               | 1K JA 1/16W                             | R2908                 | 401 256 0408                 | MT-GLAZE<br>MT-GLAZE | 12K JA 1/10W<br>12K JA 1/10W |
| R896                  | 401 024 6700                 | CARBON               | 100 JA 1/6W                             | R2909                 | 401 256 5601                 | MT-GLAZE             | 47 JA 1/10W                  |
| R897                  | 401 024 6700                 | CARBON               | 100 JA 1/6W                             | R2910                 | 401 150 6100                 | MT-GLAZE             | 2.2K JA 1/10W                |
| R898                  | 401 024 6700                 | CARBON               | 100 JA 1/6W                             | R2916                 | 401 026 9303                 | CARBON               | 47 JA 1/6W                   |
| R899                  | 401 024 6700                 | CARBON               | 100 JA 1/6W                             | R2917                 | 401 256 0408                 | MT-GLAZE             | 12K JA 1/10W                 |
| R1262                 | 401 256 2709                 | MT-GLAZE             | 75 JA 1/10W                             | R2918                 | 401 256 0408                 | MT-GLAZE             | 12K JA 1/10W                 |
| R1263                 | 401 027 6608                 | CARBON               | 75 JA 1/6W                              | R2919                 | 401 256 5601                 | MT-GLAZE             | 47 JA 1/10W                  |
| R1264                 | 401 024 7004                 | CARBON               | 1K JA 1/6W                              | R2920                 | 401 150 6100                 | MT-GLAZE             | 2.2K JA 1/10W                |
| R1265                 | 401 256 2709                 | MT-GLAZE             | 75 JA 1/10W                             | R2921                 | 401 024 7004                 | CARBON               | 1K JA 1/6W                   |
| R1266                 | 401 027 6608                 | CARBON               | 75 JA 1/6W                              | R2922                 | 401 150 6100                 | MT-GLAZE             | 2.2K JA 1/10W                |
| R1267                 | 401 256 1702                 | MT-GLAZE             | 33K JA 1/10W                            | R2926                 | 401 026 9303                 | CARBON               | 47 JA 1/6W                   |
| R1268                 | 401 256 2709                 | MT-GLAZE             | 75 JA 1/10W                             | R2927                 | 401 256 0408                 | MT-GLAZE             | 12K JA 1/10W                 |
| R1269                 | 401 027 6608                 | CARBON               | 75 JA 1/6W                              | R2928                 | 401 256 0408                 | MT-GLAZE             | 12K JA 1/10W                 |
| R1270                 | 401 024 6700                 | CARBON               | 100 JA 1/6W                             | R2929                 | 401 256 5601                 | MT-GLAZE             | 47 JA 1/10W                  |
| R1271                 | 401 024 6700                 | CARBON               | 100 JA 1/6W                             | R2930                 | 401 150 6100                 | MT-GLAZE             | 2.2K JA 1/10W                |
| R1272                 | 401 024 6700                 | CARBON               | 100 JA 1/6W                             | R2931                 | 401 256 2709                 | MT-GLAZE             | 75 JA 1/10W                  |
| R1279                 | 401 150 6209                 | MT-GLAZE             | 1K JA 1/10W                             | R2932                 | 401 256 2709                 | MT-GLAZE             | 75 JA 1/10W                  |
| R1280                 | 401 256 4109                 | MT-GLAZE             | 56 JA 1/10W                             | R2933                 | 401 256 2709                 | MT-GLAZE             | 75 JA 1/10W                  |
| R1281                 | 401 256 6301                 | MT-GLAZE             | 47K JA 1/10W                            | R2940                 | 401 256 0408                 | MT-GLAZE             | 12K JA 1/10W                 |
| R1282                 | 401 150 5905                 | MT-GLAZE             | 10K JA 1/10W                            | R2941                 | 401 256 0408                 | MT-GLAZE             | 12K JA 1/10W                 |
| R1283                 | 401 162 3005                 | MT-GLAZE             | 22K JA 1/10W                            | R2942                 | 401 256 5601                 | MT-GLAZE             | 47 JA 1/10W                  |
| R1284                 | 401 024 7400                 | CARBON               | 10K JA 1/6W                             | R2943                 | 401 150 6100                 | MT-GLAZE             | 2.2K JA 1/10W                |
| R1285                 | 401 256 1702                 | MT-GLAZE             | 33K JA 1/10W                            | R2944                 | 401 026 9303                 | CARBON               | 47 JA 1/6W                   |
| R1286                 | 401 256 7209                 | MT-GLAZE             | 18K JA 1/10W                            | R2945                 | 401 256 2709                 | MT-GLAZE             | 75 JA 1/10W                  |
| R1287                 | 401 256 1702                 | MT-GLAZE             | 33K JA 1/10W                            | R2946                 | 401 256 0408                 | MT-GLAZE             | 12K JA 1/10W                 |
| R1288                 | 401 256 4109                 | MT-GLAZE             | 56 JA 1/10W                             | R2947                 | 401 256 0408                 | MT-GLAZE             | 12K JA 1/10W                 |
| R1289                 | 401 256 7209                 | MT-GLAZE             | 18K JA 1/10W                            | R2948                 | 401 256 5601                 | MT-GLAZE             | 47 JA 1/10W                  |
| R1290                 | 401 256 1702                 | MT-GLAZE             | 33K JA 1/10W                            | R2949                 | 401 150 6100                 | MT-GLAZE             | 2.2K JA 1/10W                |
| R1291<br>R1294        | 401 256 4109                 | MT-GLAZE             | 56 JA 1/10W                             | R2950                 | 401 026 9303                 | CARBON               | 47 JA 1/6W                   |
| R1294<br>R1295        | 401 256 4109                 | MT-GLAZE             | 56 JA 1/10W                             | R2951                 | 401 256 0408                 | MT-GLAZE             | 12K JA 1/10W                 |
| n 1290                | 401 150 6209                 | MT-GLAZE             | 1K JA 1/10W                             | R2952                 | 401 150 6100                 | MT-GLAZE             | 2.2K JA 1/10W                |

| Schematic<br>Location | Part No.                     | Des                | cription                    | Schematic<br>Location | Part No.                     | Desc                     | ription  |              |
|-----------------------|------------------------------|--------------------|-----------------------------|-----------------------|------------------------------|--------------------------|----------|--------------|
| R2953                 | 401 026 9303                 | CARBON             | 47 JA 1/6W                  | PO                    | WER / DEFLE                  | CTION PO                 | BOAF     | RD           |
| R2954                 | 401 256 2709                 | MT-GLAZE           | 75 JA 1/10W                 |                       |                              |                          |          |              |
| R2955                 | 401 256 2709                 | MT-GLAZE           | 75 JA 1/10W                 |                       | CAPACITORS                   |                          | 1        | +0.1         |
| R2956                 | 401 256 2709                 | MT-GLAZE           | 75 JA 1/10W                 | C401                  | 403 050 6600                 | ELECT                    | 3.3U M   | 50V          |
| R2957                 | 401 256 5601                 | MT-GLAZE           | 47 JA 1/10W                 | C402                  | 403 148 1609                 | ELECT                    | 470U M   | 50V          |
| R2958                 | 401 256 2709                 | MT-GLAZE           | 75 JA 1/10W                 | ★ C403                | 403 247 5003                 | CERAMIC                  | 470P K   | 1K           |
| R2959                 | 401 256 0408                 | MT-GLAZE           | 12K JA 1/10W                | ★ C404                | 403 222 1907                 | CERAMIC                  | 2200P K  | 1K           |
| R2960                 | 401 256 2709                 | MT-GLAZE           | 75 JA 1/10W                 | 2.405                 | 403 263 6305                 | CERAMIC                  | 2200P K  | 1K           |
| R3411                 | 401 150 5905                 | MT-GLAZE           | 10K JA 1/10W                | C405                  | 403 334 4209                 |                          | 2200U M  | 16V          |
| R3412                 | 401 150 5905                 | MT-GLAZE           | 10K JA 1/10W                | C408                  | 403 364 5405                 | CERAMIC                  | 150P K   | 1K           |
| R3413                 | 401 024 6700                 | CARBON             | 100 JA 1/6W                 | ★ C411                | 403 348 5625                 | MT-POLYPRO               |          | 1.5K         |
| R3414                 | 401 024 6700                 | CARBON             | 100 JA 1/6W                 | ★ C412                | 403 348 5625                 | MT-POLYPRO               |          | 1.5K         |
| R3415                 | 401 255 6500                 | MT-GLAZE           | 100 JA 1/10W                | ★ C414                | 403 076 0507                 | CERAMIC                  | 2200P K  | 500V         |
| R3416                 | 401 150 6209                 | MT-GLAZE           | 1K JA 1/10W                 | ★ C415                | 403 324 3106                 | CERAMIC                  | 820P K   | 3K           |
| R3417                 | 401 255 6500                 | MT-GLAZE           | 100 JA 1/10W                | ★ C416                | 403 076 1405                 | CERAMIC                  | 2700P K  | 500V         |
| R3422                 | 401 150 5905                 | MT-GLAZE           | 10K JA 1/10W                | ★ C417                | 403 036 5207                 | CERAMIC                  | 68P J    | 500V         |
| R3423                 | 401 150 5905                 | MT-GLAZE           | 10K JA 1/10W                | C421                  | 404 091 6406                 | ELECT                    | 220U M   | 6.3V         |
| R3424                 | 401 024 6700                 | CARBON             | 100 JA 1/6W                 | ★ C423                | 403 349 3105                 | MT-POLYPRO               |          | 250V         |
| R3425                 | 401 150 6209                 | MT-GLAZE           | 1K JA 1/10W                 |                       | 403 376 2706                 | MT-POLYPRO               |          | 250V<br>250V |
| R3426                 | 401 024 6700                 | CARBON             | 100 JA 1/6W                 | . 0404                | 403 372 6203                 | MT-POLYPRO               |          | 250V         |
| R3434                 | 401 162 4002                 | MT-GLAZE           | 560 JA 1/10W                | ★ C424                | 403 349 3105                 | MT-POLYPRO<br>MT-POLYPRO |          | 250V<br>250V |
| R3435                 | 401 150 5806                 | MT-GLAZE           | 100K JA 1/10W               |                       | 403 376 2706                 | MT-POLYPRO               |          | 250V<br>250V |
| R3436                 | 401 162 4002                 | MT-GLAZE           | 560 JA 1/10W                | 0.400                 | 403 372 6203                 | MT-POLYEST               |          | 100V         |
| R3437                 | 401 150 5806                 | MT-GLAZE           | 100K JA 1/10W               | C460                  | 403 183 7901                 | POLYPRO                  | 6800P J  | 630V         |
| R3458                 | 401 150 6209                 | MT-GLAZE           | 1K JA 1/10W                 | ★ C462                | 403 084 3527                 | POLYPRO                  | 6800P J  | 630V         |
| R3460                 | 401 150 6209                 | MT-GLAZE           | 1K JA 1/10W                 | ★ C463<br>★ C464      | 403 084 3527<br>403 188 0808 | MT-POLYEST               |          | 100V         |
| R3601                 | 401 150 5905                 | MT-GLAZE           | 10K JA 1/10W                | ★ C464<br>★ C465      | 403 188 0808                 | MT-POLYEST               |          | 100V         |
| R3602                 | 401 150 5905                 | MT-GLAZE<br>CARBON | 10K JA 1/10W<br>220 JA 1/6W | ★ C466                | 403 188 0808                 | MT-POLYEST               |          | 100V         |
| R3603                 | 401 025 7409<br>401 025 7409 | CARBON             | 220 JA 1/6W                 | C468                  | 403 258 8505                 | NP-ELECT                 | 22U M    | 16V          |
| R3604<br>R3608        | 401 025 7409                 | MT-GLAZE           | 1M JA 1/10W                 | ★ C470                | 403 084 3527                 | POLYPRO                  | 6800P J  | 630V         |
| R3609                 | 401 150 5806                 | MT-GLAZE           | 100K JA 1/10W               | C471                  | 403 063 7809                 | POLYESTER                |          | 50V          |
| R3611                 | 401 256 7308                 | MT-GLAZE           | 6.8K JA 1/10W               | 0471                  | 403 312 3507                 | POLYESTER                |          | 50V          |
| R3613                 | 401 265 4008                 | MT-GLAZE           | 62K JA 1/10W                | C472                  | 403 059 6205                 | POLYESTER                |          | 50V          |
| R3622                 | 401 162 3104                 | MT-GLAZE           | 3.3K JA 1/10W               | 0472                  | 403 312 0506                 | POLYESTER                |          | 50V          |
| R3623                 | 401 255 6401                 | MT-GLAZE           | 3K JA 1/10W                 | C482                  | 403 259 9907                 | ELECT                    | 47U M    | 160V         |
| R3628                 | 401 256 7605                 | MT-GLAZE           | 3.9K JA 1/10W               | C483                  | 403 059 3808                 | POLYESTER                |          | 50V          |
| R5501                 | 401 256 0408                 | MT-GLAZE           | 12K JA 1/10W                | 0.00                  | 403 312 0308                 | POLYESTER                | 2200P K  | 50V          |
| R5502                 | 401 150 5905                 | MT-GLAZE           | 10K JA 1/10W                | C484                  | 404 084 4204                 | ELECT                    | 4.7U M   | 5 <b>0V</b>  |
| R5503                 | 401 150 5905                 | MT-GLAZE           | 10K JA 1/10W                | C493                  | 404 056 5307                 | NP-ELECT                 | 2.2U M   | 100V         |
| R5504                 | 401 256 6301                 | MT-GLAZE           | 47K JA 1/10W                | C504                  | 403 209 7205                 |                          | 2200U M  | 25V          |
| R5505                 | 401 256 6301                 | MT-GLAZE           | 47K JA 1/10W                | C505                  | 403 148 0404                 |                          | 1000U M  | 25V          |
| R5506                 | 401 162 3005                 | MT-GLAZE           | 22K JA 1/10W                | C507                  | 403 148 1401                 | ELECT                    | 220U M   | 50V          |
| R5507                 | 401 024 7400                 | CARBON             | 10K JA 1/6W                 | C508                  | 403 161 8302                 | MT-POLYEST               | 0.47U K  | 100V         |
|                       |                              |                    |                             | C510                  | 403 036 2503                 | CERAMIC                  | 47P K    | 500V         |
|                       | MISCELLAN                    | EOUS               |                             | C513                  | 403 075 8009                 | CERAMIC                  | 0.01U K  | 500V         |
| A100                  | 610 312 3240                 |                    | MAIN-H3ELM                  | C515                  | 404 084 4006                 | ELECT                    | 2.2U M   | 50V          |
| ★ A101                | 645 064 2555                 | TUNER, TU/I        |                             | ★ C608                | 403 247 5003                 | CERAMIC                  | 470P K   | 1K           |
| X2809                 | 645 046 9213                 | OSC, CERAM         |                             |                       | 403 269 1809                 | CERAMIC                  | 470P K   | 1K           |
| X8219                 | 645 026 8434                 | OSC, CRYST.        | AL 8.000MHZ                 |                       | 403 232 0501                 | CERAMIC                  | 470P K   | 1K           |
|                       |                              |                    |                             | <b>★</b> C609         | 404 096 2809                 | ELECT                    | 680U M   | 200V         |
|                       |                              |                    |                             | C613                  | 403 148 1708                 | ELECT                    | 100U M   | 35V          |
|                       |                              |                    |                             | C614                  | 403 083 4307                 |                          | 0.022U J | 400V         |
|                       |                              |                    |                             | C615                  | 403 138 9905                 | POLYESTER                | 470P J   | 50V          |
|                       |                              |                    |                             | _                     | 403 276 9102                 | POLYESTER                | 470P J   | 50V          |
|                       |                              |                    |                             | C616                  | 403 057 5309                 | POLYESTER                | 1200P J  | 50V          |
|                       |                              |                    |                             |                       | 403 179 3702                 | POLYESTER                | 1200P J  | 50V          |
|                       |                              |                    |                             | C619                  | 403 069 8305                 | CERAMIC                  | 0.01U Z  | 50V          |
|                       |                              |                    |                             | C622                  | 404 085 4500                 |                          | 2200U M  | 25V          |
|                       |                              |                    |                             | C624                  | 404 096 2403                 | ELECT                    | 470U M   | 160V         |

| Schematic<br>Location | Part No.     | De          | scription |              | Schematic<br>Location | Part No.     | Description          |
|-----------------------|--------------|-------------|-----------|--------------|-----------------------|--------------|----------------------|
| C625                  | 403 266 5008 | CERAMIC     | 2700P K   | 1K           | D504                  | 407 100 0204 | ZENER DIODE MTZJ36A  |
|                       | 403 232 0402 | CERAMIC     | 2700P K   | 1K           |                       | 407 100 0303 | ZENER DIODE MTZJ36B  |
| C626                  | 403 196 4201 | ELECT       | 3300U M   | 16V          |                       | 407 100 0402 | ZENER DIODE MTZJ36C  |
| C628A                 | 404 096 2403 | ELECT       | 470U M    | 160V         | D508                  | 408 008 2406 |                      |
| C629                  | 403 196 4201 | ELECT       | 3300U M   | 16V          | D300                  | 407 013 4306 | DIODE 1N4148         |
| ★ C633                | 404 088 7706 | CERAMIC     | 1500P M   | 250V         |                       |              | DIODE 1S2076A        |
| 4000                  | 404 088 7805 | CERAMIC     | 1500P M   | 250V<br>250V | DEOO                  | 407 013 7109 | DIODE 1S2473         |
| ★ C635                | 404 088 7706 | CERAMIC     | 1500P M   | 250V<br>250V | D509                  | 407 063 9108 | ZENER DIODE MTZJ6.8B |
| ~ 0000                | 404 088 7805 | CERAMIC     |           |              | D.54.0                | 407 099 5709 | ZENER DIODE MTZJ6.8C |
| C640                  | 404 092 1905 | ELECT       | 1500P M   | 250V         | D510                  | 408 008 2406 | DIODE 1N4148         |
| C641                  | 403 271 9602 |             | 100U M    | 50V          |                       | 407 013 4306 | DIODE 1S2076A        |
| 0041                  |              | CERAMIC     | 1000P K   | 1K           | _0.                   | 407 013 7109 | DIODE 1S2473         |
| CC 40                 | 403 262 1806 | CERAMIC     | 1000P K   | 1K           | D511                  | 407 118 2207 | ZENER DIODE 1Z75     |
| C642                  | 404 092 2001 | ELECT       | 470U M    | 50V          | D512                  | 407 118 2207 | ZENER DIODE 1Z75     |
| C644                  | 404 074 9103 | ELECT       | 220U M    | 160V         | D513                  | 407 063 8606 | ZENER DIODE MTZJ5.1A |
| C656                  | 404 087 3105 | ELECT       | 220 M     | 50V          |                       | 407 099 5204 | ZENER DIODE MTZJ5.1B |
| C686                  | 403 247 5003 | CERAMIC     | 470P K    | 1K           |                       | 407 063 8705 | ZENER DIODE MTZJ5.10 |
|                       | 403 269 1809 | CERAMIC     | 470P K    | 1K           | D514                  | 407 063 8606 | ZENER DIODE MTZJ5.1A |
|                       | 403 232 0501 | CERAMIC     | 470P K    | 1K           |                       | 407 099 5204 | ZENER DIODE MTZJ5.1B |
|                       |              |             |           |              |                       | 407 063 8705 | ZENER DIODE MTZJ5.1C |
|                       | DIODES       |             |           |              | ★ D612                | 407 231 2801 | PHOTO COUPLE PC123YC |
| D401                  | 407 222 4401 | ZENER DIOD  | E 1Z150   |              | D613                  | 407 006 0100 | DIODE ERA91-02       |
| D402                  | 408 008 2406 | DIODE 1N41  | 48        |              | D614                  | 407 006 0100 | DIODE ERA91-02       |
|                       | 407 013 4306 | DIODE 1S20  | 76A       |              | D615                  | 407 099 3309 |                      |
|                       | 407 013 7109 | DIODE 1S24  |           |              | 5010                  | 407 054 4808 | ZENER DIODE MTZJ13C  |
| D411                  | 407 142 5908 | DIODE FMP-  |           |              | D616                  |              | ZENER DIODE RD13EB3  |
| D412                  | 407 157 0806 | DIODE RS4F  |           |              | D010                  | 408 008 2406 | DIODE 1N4148         |
| D413                  | 407 063 9603 | ZENER DIOD  |           |              |                       | 407 013 4306 | DIODE 1S2076A        |
|                       | 407 099 6003 | ZENER DIOD  |           |              | D047                  | 407 013 7109 | DIODE 1S2473         |
| ★ D421                | 407 158 1307 | ZENER DIOD  |           |              | D617                  | 408 008 2406 | DIODE 1N4148         |
| ★ D422                | 407 158 1307 | ZENER DIOD  |           |              | D-10                  | 407 013 4306 | DIODE 1S2076A        |
| D428                  | 407 099 8007 | ZENER DIOD  |           |              | D618                  | 408 008 2406 | DIODE 1N4148         |
| O TEO                 | 407 055 1905 | ZENER DIOD  |           |              |                       | 407 013 4306 | DIODE 1S2076A        |
| D429                  | 408 008 2406 | DIODE 1N41  |           |              | _                     | 407 013 7109 | DIODE 1S2473         |
| D423                  | 407 013 4306 | DIODE 1820  |           |              | D621                  | 407 106 2806 | DIODE RU3YX          |
|                       | 407 013 7109 |             |           |              | D623                  | 408 008 2406 | DIODE 1N4148         |
| D460                  | 408 008 2406 | DIODE 18247 |           |              |                       | 407 013 4306 | DIODE 1S2076A        |
| D400                  |              | DIODE 1N414 |           |              |                       | 407 013 7109 | DIODE 1S2473         |
|                       | 407 013 4306 | DIODE 1S207 |           |              | D624                  | 407 168 6507 | DIODE FMX-G128       |
| DACA                  | 407 013 7109 | DIODE 18247 |           |              | D625                  | 407 191 3900 | DIODE FML-G16S       |
| D461                  | 407 221 5003 | DIODE FMC-0 |           |              | D627                  | 407 168 6507 | DIODE FMX-G12S       |
| D462                  | 407 099 6102 | ZENER DIODI |           |              | D631                  | 407 007 7603 | DIODE EU2            |
| D467                  | 408 008 2406 | DIODE 1N414 |           |              |                       | 407 007 7801 | DIODE EU2Z           |
|                       | 407 013 4306 | DIODE 1S207 |           |              | D635                  | 407 099 9509 | ZENER DIODE MTZJ30B  |
|                       | 407 013 7109 | DIODE 1S247 | 3         |              | D641                  | 407 007 7306 | DIODE EU01Z          |
| D468                  | 408 008 2406 | DIODE 1N414 | 8         |              | D642                  | 407 099 9509 | ZENER DIODE MTZJ30B  |
|                       | 407 013 4306 | DIODE 1S207 | 6A        |              | 5012                  | 407 056 0204 | ZENER DIODE RD30EB2  |
|                       | 407 013 7109 | DIODE 1S247 | 3         |              | D643                  | 407 222 4401 |                      |
| D481                  | 407 124 6404 | DIODE ERA18 |           |              | D649                  |              | ZENER DIODE 1Z150    |
|                       | 407 007 6606 | DIODE ES1   |           |              | 0049                  | 408 008 2406 | DIODE 1N4148         |
|                       | 407 124 5506 | DIODE RMPG  | 06G       |              |                       | 407 013 4306 | DIODE 1S2076A        |
| D482                  | 407 011 4407 | DIODE TVR16 |           |              | DOFO                  | 407 013 7109 | DIODE 1S2473         |
| D486                  | 408 008 2406 | DIODE 1N414 |           |              | D652                  | 408 008 2406 | DIODE 1N4148         |
|                       | 407 013 4306 | DIODE 18207 |           |              |                       | 407 013 4306 | DIODE 1S2076A        |
|                       | 407 013 4300 |             |           |              |                       | 407 013 7109 | DIODE 1S2473         |
| D504                  |              | DIODE 18247 |           |              | D656                  | 407 106 2806 | DIODE RU3YX          |
| D501                  | 407 005 7308 | DIODE EMO1Z |           |              | D695                  | 407 129 3002 | DIODE ERA22-06       |
|                       | 407 005 8602 | DIODE ERA15 |           |              |                       | 407 007 7108 | DIODE EU01A          |
| Proc                  | 407 088 6502 | DIODE MPG06 |           |              |                       |              |                      |
| D502                  | 407 118 2207 | ZENER DIODE |           |              |                       | INTEGRATED   | CIRCUITS             |
| D503                  | 407 100 0204 | ZENER DIODE | MTZJ36A   |              | <b>★</b> IC501        | 409 374 0607 | IC LA7846N           |
|                       | 407 100 0303 | ZENER DIODE |           |              | ★ IC601               | 409 169 5800 | IC SE140NL           |
|                       |              |             |           |              |                       |              |                      |

| Schematic     | Part No.     | 1                      |                   | <del></del> | Schematic | .1            |                |           |        |
|---------------|--------------|------------------------|-------------------|-------------|-----------|---------------|----------------|-----------|--------|
| Location      | Part IVO.    |                        | Descriptio        | on          | Location  | Part No.      | De             | scriptio  | n      |
|               | COILS        |                        |                   |             | R428      | 401 025 1902  | CARBON         | 15K J     | A 1/6V |
| L411          | 610 236 6440 |                        |                   |             | R429      | 401 025 5405  | CARBON         |           | A 1/6V |
| L413          | 610 078 5946 | PIPE COF               |                   |             | ★ R461    | 402 002 9805  | FUSIBLE RE     |           |        |
| L414          | 610 078 6820 | PIPE COR               |                   |             | R462      | 401 202 1909  | MT-FILM        | 680 F     |        |
| L416          | 610 078 4635 | PIPECOR                |                   |             | R464      | 401 097 3903  | MT-FILM        | 39K F     |        |
| L417          | 610 078 4635 | PIPECOR                |                   |             | R466      | 401 053 3008  | MT-FILM        | 470 F     |        |
| L421          | 645 039 9381 | COIL, LIN              |                   |             | R467      | 401 053 2605  | MT-FILM        | 3.3K F    |        |
| L460          | 645 020 4043 | INDUCTO                | R, 1500U          |             | R468      | 401 024 7004  | CARBON         | 1K J      |        |
| ★ L461        | 610 000 0148 | COIL                   |                   |             | R470      | 401 025 8208  | CARBON         | 22K J/    |        |
| . 1.400       | 645 037 8065 | INDUCTO                | R, 212U           |             | R475      | 401 097 3903  | MT-FILM        | 39K F/    |        |
| <b>★</b> L462 | 610 000 0148 | COIL                   |                   |             | R480      | 401 006 7701  | CARBON         | 1 JE      |        |
| 1.400         | 645 037 8065 | INDUCTO                |                   |             | R481      | 401 006 7701  | CARBON         | 1 JE      |        |
| L463          | 610 078 5946 | PIPE COR               |                   |             | R482      | 401 021 0701  | CARBON         | 56 JA     |        |
| L464          | 610 078 5946 | PIPE COR.              |                   |             | R487      | 401 008 2605  | CARBON         | 180K JA   |        |
| L610          | 610 078 5946 | PIPE COR               |                   |             | R488      | 401 021 3009  | CARBON         | 5.6K JA   |        |
| L613          | 610 078 5946 | PIPE CORI              |                   |             | R491      | 401 012 5708  | CARBON         | 1K JA     |        |
| L621          | 610 078 5946 | PIPE CORI              |                   |             | R493      | 401 019 2601  | CARBON         | 39K GA    |        |
| 1.000         | 652 000 1725 | CORE, PIP              |                   |             | R494      | 401 019 2601  | CARBON         | 39K GA    |        |
| L623          | 610 078 5946 | PIPE CORE              |                   |             | R495      | 401 024 9602  | CARBON         | 12K GA    |        |
| 1.004         | 652 000 1725 | CORE, PIP              |                   |             | ★ R497    | 401 061 0808  | OXIDE-MT       | 3.9 JA    |        |
| L624          | 610 078 5946 | PIPE CORE              |                   |             | R501      | 401 026 6906  | CARBON         | 3.9K GA   |        |
| 1.005         | 652 000 1725 | CORE, PIP              |                   |             | ★ R503    | 402 002 3803  | FUSIBLE RES    |           |        |
| L625          | 610 078 5946 | PIPE CORE              |                   |             | ★ R504    | 402 061 0201  | FUSIBLE RES    |           |        |
| Lcon          | 652 000 1725 | CORE, PIP              |                   |             | ★ R506    | 401 064 7507  | OXIDE-MT       | 100 JA    | 2W     |
| L628          | 610 078 5946 | PIPE CORE              |                   |             | R507      | 401 007 3603  | CARBON         | 12 JA     |        |
| 1.044         | 652 000 1725 | CORE, PIPI             |                   |             | ★ R508    | 401 066 3002  | OXIDE-MT       | 2.2 JA    |        |
| L641          | 645 007 8156 | INDUCTOR               |                   |             | R509      | 401 053 4203  | MT-FILM        | 5.6K FA   |        |
|               | 645 005 5423 | INDUCTOR               | , 82U K           |             | R511      | 401 011 9004  | CARBON         | 1 JB      |        |
|               | TRANSISTO    | DC.                    |                   |             | R512      | 401 026 6906  | CARBON         | 3.9K GA   |        |
| Q401          | 405 136 0205 |                        | 10 AV             |             | R513      | 401 053 4203  | MT-FILM        | 5.6K FA   | 1/6W   |
| 401           | 405 136 0304 | TR 2SC529              |                   |             | R515      | 401 027 5502  | CARBON         | 6.8K JA   | 1/6W   |
| ★ Q402        | 406 017 4503 | TR 2SC529              |                   |             | R516      | 401 026 4605  | CARBON         | 33K JA    | 1/6W   |
| Q460          | 405 029 6307 | TR TT2140              |                   |             | ★ R604    | 401 068 5509  | OXIDE-MT       | 47K JA    | 2W     |
| Q462          | 405 018 0507 | TR 2SB817<br>TR 2SC333 |                   |             | ★ R613    | 401 238 3304  | OXIDE-MT       | 0.18 JA   | 2W     |
| 4402          | 405 018 0606 |                        |                   |             | ★ R615    | 401 238 3304  | OXIDE-MT       | 0.18 JA   | 2W     |
| Q642          | 405 011 8401 | TR 2SC3333             |                   |             | R616      | 401 014 2903  | CARBON         | 150 JA    | 1/4W   |
| 4042          | 405 011 8500 | TR 2SC174              |                   |             | R617      | 401 018 3807  | CARBON         | 3.3K JA   | 1/4W   |
|               | 405 011 8609 | TR 2SC174              |                   |             | R618      | 401 024 7004  | CARBON         | 1K JA     |        |
|               | 405 012 2002 | TR 2SC174              |                   |             | R619      | 401 016 3809  | CARBON         | 2.2K JA   |        |
|               | 405 012 2309 | TR 2SC1818             |                   |             | R621      | 401 026 9907  | CARBON         | 4.7K JA   | 1/6W   |
|               | 405 157 0505 | TR 2SC1818             |                   |             | R622      | 401 022 2001  | CARBON         | 680 JB    | 1/4W   |
|               | 405 151 8705 | TR 2SC536/             |                   |             | R623      | 401 027 8602  | CARBON         | 8.2K JA   | 1/6W   |
|               | 405 020 7501 | TR 2SC5361             |                   |             | R624      | 401 024 7400  | CARBON         | 10K JA    |        |
|               | 405 020 7709 | TR 2SC945/             |                   |             | ★ R635    | 401 065 4604  | OXIDE-MT       | 12K JA    | 2W     |
|               | 403 020 7709 | TR 2SC945A             | N-QA              |             | R640      | 401 024 7707  | CARBON         |           | 1/6W   |
|               | RESISTORS    |                        |                   |             | R641      | 401 011 2708  | CARBON         |           | 1/2W   |
| R402          | 401 027 2303 | CARBON                 | 560 JA            | 4 (6)41     | R642      | 401 025 8208  | CARBON         | 22K JA    |        |
| R405          | 401 027 2600 | CARBON                 | 5.6K JA           |             | R646      | 401 024 7400  | CARBON         | 10K JA    |        |
| ★ R406        | 401 064 8702 | OXIDE-MT               | 1K JA             | 1/6W<br>2W  |           |               |                |           |        |
| ★ R407        | 401 068 6902 | OXIDE-MT               | 56 JA             |             | 7.01      | TRANSFORM     |                |           |        |
| ★ R409        | 401 069 5607 | OXIDE-IVIT             | 8.2 JA            | 2W<br>2W    | T401      | 645 041 1083  | TRANS, DRIVE   |           |        |
| ★ R410        | 401 062 5109 | OXIDE-MT               | 56 JA             |             | ★ T402    | 6450637957    | TRANS, FLYBA   |           |        |
| ★ R411        | 401 063 2008 | OXIDE-MT               | 6.8K JA           | 1W<br>1W    | ★ T601    | 645 063 6417  | TRANS, POWER   | R, PULSE  |        |
| R412          | 401 024 9701 | CARBON                 | 12K JA            |             |           |               |                |           |        |
| R416          | 401 012 4503 | CARBON                 |                   |             |           | MISCELLANE    | OUS            |           |        |
| ★ R421        | 401 148 7201 | MT-FILM                | 1.8K FA           | 1/4W        | A401      | 610 310 6823  | ASSY, PWB, P/0 | 1-H2CI 44 |        |
| ★ R422        | 401 052 6802 | MT-FILM                |                   |             |           | - 10 010 0020 | 7001, FWD, P/L | - HOULIVI |        |
| ★ R423        | 401 053 2605 | MT-FILM                | 10K FA<br>3.3K FA |             | *         |               |                |           |        |
| ★ R424        | 401 067 5302 | OXIDE-MT               |                   | 1/6W        |           |               |                |           |        |
|               | 401 007 JJUZ | OVIDE-INI              | 330 JA            | 2W          |           |               |                |           |        |

| Schematic<br>Location | Part No.             | Des           | scription |      | Schematic<br>Location | Part No.     | D           | escription             | 1           |
|-----------------------|----------------------|---------------|-----------|------|-----------------------|--------------|-------------|------------------------|-------------|
| L                     | FRONT P              | C BOARD       |           |      |                       | TRANSISTO    | )PC         | ··                     | · · · · · · |
|                       |                      |               |           |      | Q001                  | 405 011 8401 | TR 2SC174   | וחפ-ח                  |             |
|                       | CAPACITOR            | RS            |           |      | 4001                  | 405 011 8500 | TR 2SC174   |                        |             |
| C001                  | 404 084 3900         | ELECT         | 10U M     | 50V  |                       | 405 011 8609 | TR 2SC174   |                        |             |
| C006                  | 404 084 4204         | ELECT         | 4.7U M    | 50V  |                       | 405 012 2002 | TR 2SC181   |                        |             |
| C007                  | 404 089 2700         | ELECT         | 100U M    | 25V  |                       | 405 012 2101 | TR 2SC181   |                        |             |
| C008                  | 403 073 8308         | CERAMIC       | 4700P K   | 50V  |                       | 405 012 2309 | TR 2SC181   |                        |             |
| C009                  | 403 073 8308         | CERAMIC       | 4700P K   | 50V  |                       | 405 157 0505 | TR 2SC536   |                        |             |
| C010                  | 404 089 4100         | ELECT         | 3300U M   | 25V  |                       | 405 151 8705 | TR 2SC536   |                        |             |
| C011                  | 404 089 4100         | ELECT         | 3300U M   | 25V  |                       | 405 020 7501 | TR 2SC945   |                        |             |
| C013                  | 404 084 3900         | ELECT         | 10U M     | 50V  |                       | 405 020 7709 | TR 2SC945   |                        |             |
| C015                  | 404 084 3405         | ELECT         | 1000U M   | 25V  |                       | 405 020 7703 | TR 2SC945   |                        |             |
| <b>★</b> C600         | 403 076 4000         | CERAMIC       | 4700P K   | 500V | Q688                  | 406 000 6804 | TR 2SA101   |                        |             |
| ★ C601                | 404 096 0706         | MT-POLYEST    |           | 275V | 4000                  | 405 001 7605 | TR 2SA101   | S-CIN(SAN)<br>K-V/CANN |             |
| <b>★</b> C602         | 403 075 7101         | CERAMIC       | 1000P K   | 500V |                       | 405 004 3208 | TR 2SA564   |                        |             |
| ★ C604                | 403 075 710 <b>1</b> | CERAMIC       | 1000P K   | 500V |                       | 405 151 3304 | TR 2SA608   |                        |             |
| ★ C610                | 404 096 0508         | MT-POLYEST    |           | 275V |                       | 405 006 1806 | TR 2SA933   |                        |             |
| C688                  | 404 084 2804         | ELECT         | 100U M    | 16V  | Q1611                 | 405 016 9403 | TR 2SC306   |                        |             |
| C689                  | 403 069 8305         | CERAMIC       | 0.01U Z   | 50V  | 4.011                 | 100 010 3400 | 111 230300  | O                      |             |
| C1613                 | 404 095 1704         | ELECT         | 2200U M   | 16V  |                       | RESISTORS    |             |                        |             |
| C1614                 | 403 069 8305         | CERAMIC       | 0.01U Z   | 50V  | R001                  | 401 024 7004 | CARBON      | 1K.IA                  | 1/6W        |
| C1615                 | 404 084 2606         | ELECT         | 470U M    | 10V  | R002                  | 401 024 7004 | CARBON      | 1K JA                  |             |
| C1618                 | 403 069 8305         | CERAMIC       | 0.01U Z   | 50V  | R003                  | 401 027 5205 | CARBON      | 680 JA                 |             |
| C1620                 | 403 069 8305         | CERAMIC       | 0.01U Z   | 50V  | R004                  | 401 027 5205 | CARBON      | 680 JA                 |             |
| C1902                 | 404 084 2705         | ELECT         | 10U M     | 16V  | ★ R007                | 402 070 4108 | WIRE WOU    |                        |             |
| C1903                 | 404 084 2408         | ELECT         | 470U M    | 6.3V |                       | 402 073 9506 | WIRE WOU    |                        |             |
|                       |                      |               |           |      | R008                  | 401 027 8602 | CARBON      | 8.2K JA                |             |
|                       | DIODES               |               |           |      | R011                  | 401 026 3905 | CARBON      | 330 JA                 |             |
| ★ D601                | 407 124 9801         | DIODE RBV-60  | 08        |      | R012                  | 401 027 2600 | CARBON      | 5.6K JA                |             |
| D683                  | 408 008 2406         | DIODE 1N4148  |           |      | ★ R601                | 402 097 5607 | WIRE WOU    |                        |             |
|                       | 407 013 4306         | DIODE 1S2076  |           |      | ★ R602                | 401 069 3702 | OXIDE-MT    | 6.8K JA                | 2W          |
|                       | 407 013 7109         | DIODE 1S2473  |           |      | R603                  | 402 000 1603 | SOLID       | 3.3M MA                | 1/2W        |
| D687                  | 408 008 2406         | DIODE 1N4148  |           |      |                       | 402 088 1502 | RESISTER    | 3.3M JA                | 1/2W        |
|                       | 407 013 4306         | DIODE 1S2076  |           |      |                       | 402 090 2108 | RESISTER    | 3.3M JA                | 1/2W        |
| 5.6                   | 407 013 7109         | DIODE 1S2473  |           |      | R686                  | 401 013 4205 | CARBON      | 120 JA                 | 1/4W        |
| D1611                 | 407 012 4406         | DIODE 1SS133  |           |      | R687                  | 401 025 8208 | CARBON      | 22K JA                 |             |
| D1612                 | 407 005 8602         | DIODE ERA15-  |           |      | R688                  | 401 024 9701 | CARBON      | 12K JA                 |             |
| 04040                 | 407 124 5605         | DIODE RMPGO   |           |      | R1611                 | 401 027 2600 | CARBON      | 5.6K JA                |             |
| D1613                 | 407 005 8602         | DIODE ERA15-  |           |      | R1612                 | 401 026 4605 | CARBON      | 33K JA                 | 1/6W        |
| D4044                 | 407 124 5605         | DIODE RMPGO   |           |      | R1901                 | 401 024 7400 | CARBON      | 10K JA                 |             |
| D1614                 | 407 005 8602         | DIODE ERA15-  |           |      | R1902                 | 401 024 7004 | CARBON      | 1K JA                  |             |
| D4045                 | 407 124 5605         | DIODE RMPGO   |           |      | R1903                 | 401 025 4200 | CARBON      | 1.8K JA                | 1/6W        |
| D1615                 | 407 005 8602         | DIODE ERA15-  |           |      | R1904                 | 401 025 7805 | CARBON      | 2.2K JA                | 1/6W        |
| D4004                 | 407 124 5605         | DIODE RMPGO   |           |      | R1905                 | 401 026 7002 | CARBON      | 3.9K JA                | 1/6W        |
| D1901                 | 407 063 9306         | ZENER DIODE   |           |      | R1906                 | 401 027 2600 | CARBON      | 5.6K JA                |             |
|                       | 407 057 6502         | ZENER DIODE I | RD7.5EB3  |      | R1909                 | 401 024 7004 | CARBON      | 1K JA                  |             |
|                       | INTECOATER           | N OUDOL HTO   |           |      | R1910                 | 401 024 7004 | CARBON      | 1K JA                  |             |
| 10004                 | INTEGRATED           |               |           |      |                       |              |             |                        |             |
| 10001                 | 409 569 1907         | IC LA42052-E  |           |      |                       | SWITCHES     |             |                        |             |
| IC1611                | 409 528 6202         | IC PQ050ES1M  | IXP       |      | SW1901                | 645 006 9673 | SWITCH, PU  | SH (POWER              | ٦)          |
|                       | COILS                |               |           |      |                       | 645 027 7382 | SWITCH, PU  |                        |             |
| ★ LF601               | 645 012 0589         | LINE EILTED   |           |      |                       | 645 052 2284 | SWITCH, PU  |                        |             |
|                       | 645 026 8274         | LINE FILTER   |           |      | SW1902                | 645 006 9673 | SWITCH, PU  | SH (VOL +)             |             |
|                       |                      | LINE FILTER   |           |      |                       | 645 027 7382 | SWITCH, PUS | SH (VOL +)             |             |
|                       | 645 012 0589         | LINE FILTER   |           |      |                       | 645 052 2284 | SWITCH, PUS | SH (VOL +)             |             |
|                       | 645 026 8274         | LINE FILTER   | 11.17     |      | SW1903                | 645 006 9673 | SWITCH, PUS |                        |             |
| LIJUI                 | 645 008 2894         | INDUCTOR, 5.6 |           |      |                       | 645 027 7382 | SWITCH, PUS |                        |             |
|                       | 645 016 3104         | INDUCTOR, 5.6 | 11.17     |      |                       |              |             |                        |             |

| Schematic<br>Location | Part No.     | Description            | Schematic<br>Location | Part No.     | De       | scription       |            |
|-----------------------|--------------|------------------------|-----------------------|--------------|----------|-----------------|------------|
| SW1904                | 645 006 9673 | SWITCH, PUSH (CH ▲)    | C1281                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
|                       | 645 027 7382 | SWITCH, PUSH (CH ▲)    | C1282                 | 404 084 2804 | ELECT    | 100U M          | 16V        |
|                       | 645 052 2284 | SWITCH, PUSH (CH ▲)    | C1283                 | 404 084 2804 | ELECT    | 100U M          | 16V        |
| SW1905                | 645 006 9673 | SWITCH, PUSH (CH ▼)    | C7003                 | 403 235 0003 | CERAMIC  | 33P J           | 50V        |
|                       | 645 027 7382 | SWITCH, PUSH (CH ▼)    | C7004                 | 403 235 0003 | CERAMIC  | 33P J           | 50V        |
|                       | 645 052 2284 | SWITCH, PUSH (CH ▼)    | C7005                 | 404 084 2507 | ELECT    | 47U M           | 10V        |
|                       |              |                        | C7009                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
|                       | MISCELLAN    |                        | C7010                 | 404 085 4203 | ELECT    | 100U M          | 10V        |
| A1900                 | 610 311 2145 | ASSY, PWB, FRONT-H3GLM | C7011                 | 403 235 0706 | CERAMIC  | 120P J          | 50V        |
| A1901                 | 645 047 6228 | UNIT, REMOCON RECEIVER | C7012                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
| ★ F601                | 423 030 9704 | FUSE 125V 6A           | C7020                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
| F601A                 | 645 000 5077 | HOLDER, FUSE           | C7021                 | 403 224 5507 | CERAMIC  | 22P J           | 50V        |
|                       | 645 016 0479 | HOLDER, FUSE           | C7022                 | 404 085 5606 | NP-ELECT | 22U M           | 16V        |
| F601B                 | 645 000 5077 | HOLDER, FUSE           | C7023                 | 404 085 4203 | ELECT    | 100U M          | 10V        |
|                       | 645 016 0479 | HOLDER, FUSE           | C7030                 | 404 088 5702 | ELECT    | 22U M           | 16V        |
| ★ PS601               | 408 044 7106 | THERMISTOR PTDAA1BF1R5 | C7031                 | 404 085 4203 | ELECT    | 100U M          | 10V        |
| ★ RL601               | 645 040 3583 | RELAY                  | C7032                 | 403 279 0106 | CERAMIC  | 0.1 <b>U</b> Z  | 25V        |
|                       | 645 059 0306 | RELAY                  | C7033                 | 404 084 4006 | ELECT    | 2.2U M          | 50V        |
| ★ RL602               | 645 040 3583 | RELAY                  | C7034                 | 404 085 5606 | NP-ELECT | 22U M           | 16V        |
|                       | 645 059 0306 | RELAY                  | C7035                 | 403 224 5705 | CERAMIC  | 1000P K         | 50V        |
| ★ T681                | 645 065 8938 | TRANS, POWER           | C7036                 | 404 084 6901 | NP-ELECT | 1U M            | 50V        |
| ★ VA601               | 408 023 5802 | VARISTOR ENC271D-10AS  | C7038                 | 403 093 7206 | OS-SOLID | 22U M           | 10V        |
|                       | 407 151 8105 | VARISTOR 270NR14D      | C7039                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
| ★ W601                | 645 023 1698 | CORD, POWER            | C7041                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
|                       | 645 056 9548 | CORD, POWER-2.05MK     | C7101                 | 403 093 7206 | OS-SOLID | 22U M           | 10V        |
|                       | W/ CELEC     | T PC BOARD             | C7102                 | 403 093 7206 | OS-SOLID | 22U M           | 107        |
|                       | AV SELEC     | I PC BOARD             | C7103                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
|                       | CAPACITORS   | 9                      | C7104                 | 403 224 5507 | CERAMIC  | 22P J           | 50V        |
| C1001                 | 404 084 2705 | ELECT 10U M 16V        | C7105                 | 403 224 5507 | CERAMIC  | 22P J           | 50V        |
| C1001                 | 404 084 4006 | ELECT 2.2U M 50V       | C7106                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
| C1002                 | 404 084 4006 | ELECT 2.2U M 50V       | C7107                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
| C1004                 | 404 084 2705 | ELECT 10U M 16V        | C7108                 | 403 093 7206 | OS-SOLID | 22U M           | 10V        |
| C1005                 | 404 084 4006 | ELECT 2.2U M 50V       | C7109                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
| C1006                 | 404 084 4006 | ELECT 2.2U M 50V       | C7110                 | 403 093 6209 | OS-SOLID | 10U M           | 10V        |
| C1008                 | 404 084 4006 | ELECT 2.2U M 50V       | C7111                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
| C1009                 | 404 084 4006 | ELECT 2.2U M 50V       | C7112                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
| C1054                 | 403 279 0106 | CERAMIC 0.1U Z 25V     | C7113                 | 403 235 0805 | CERAMIC  | 150P J          | 50V        |
| C1055                 | 404 084 2705 | ELECT 10UM 16V         | C7115                 | 403 235 0805 | CERAMIC  | 150P J          | 50V        |
| C1056                 | 403 235 6203 | CERAMIC 0.01U Z 50V    | C7116                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
| C1057                 | 403 279 0106 | CERAMIC 0.1U Z 25V     | C7118                 | 403 314 6209 | CERAMIC  | 2.2U K          | 16V        |
| C1059                 | 404 084 2705 | ELECT 10U M 16V        | C7119                 | 403 279 0106 | CERAMIC  | 0.10 Z          | 25V        |
| C1201                 | 404 084 5508 | MT-POLYEST 0.1UJ 63V   | C7120                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
| C1201                 | 403 237 8007 | MT-COMPO 0.1UJ 50V     | C7121                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
| C1204                 | 404 084 2606 | ELECT 470U M 10V       | C7122                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
| C1205                 | 404 088 5702 | ELECT 22U M 16V        | C7124                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
| C1206                 | 403 235 4704 | CERAMIC 330P K 50V     | C7126                 | 404 084 2705 | ELECT    | 10U M           | 16V        |
| C1207                 | 403 235 4704 | CERAMIC 330P K 50V     | C7127                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
| C1211                 | 403 235 6203 | CERAMIC 0.01U Z 50V    | C7128                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
| C1214                 | 403 235 4704 | CERAMIC 330P K 50V     | C7129                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V<br>25V |
| C1215                 | 403 235 4704 | CERAMIC 330P K 50V     | C7130                 | 403 279 0106 | CERAMIC  | 0.1U Z          |            |
| C1231                 | 404 084 2606 | ELECT 470U M 10V       | C7131                 | 403 279 0106 | CERAMIC  | 0.1U Z<br>10U M | 25V<br>10V |
| C1235                 | 403 279 0106 | CERAMIC 0.1U Z 25V     | C7133                 | 403 093 6209 | OS-SOLID |                 | 25V        |
| C1236                 | 404 084 2606 | ELECT 470U M 10V       | C7134                 | 403 279 0106 | CERAMIC  | 0.1U Z          |            |
| C1238                 | 403 235 6203 | CERAMIC 0.01U Z 50V    | C7135                 | 403 093 7206 | OS-SOLID | 22U M           | 10V        |
| C1241                 | 403 235 0203 | CERAMIC 33PJ 50V       | C7136                 | 403 283 6309 | CERAMIC  | 1U K 10         | ٧          |
| C1251                 | 403 279 0106 | CERAMIC 0.1U Z 25V     | C7136                 | 403 309 1400 | CERAMIC  | 1P Z 10V        | 4014       |
| C1251                 | 404 084 3207 | ELECT 47U M 16V        | C7136                 | 403 336 5600 | CERAMIC  | 1.0U Z          | 10V        |
| C1252                 | 404 085 5606 | NP-ELECT 22U M 16V     | C7137                 | 404 084 2507 | ELECT    | 47U M           | 10V        |
| C1253                 | 404 085 5606 | NP-ELECT 22U M 16V     | C7138                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |
| U1234                 | 707 003 3000 | 141 FFEO1 250 M. 104   | C7139                 | 403 279 0106 | CERAMIC  | 0.1U Z          | 25V        |

| Schematic<br>Location | Part No.             | Descriptio           | n       | Schematic<br>Location | Part No.             | Description             |
|-----------------------|----------------------|----------------------|---------|-----------------------|----------------------|-------------------------|
| C7140                 | 404 084 2507         | ELECT 47U            |         | IC7103                | 409 517 6107         | IC UPC2925T-E2          |
| C7146                 | 403 279 0106         | CERAMIC 0.1U         |         | IC8201                | 409 449 2901         | IC CXA2019AQ            |
| C7147                 | 404 084 2507         | ELECT 47U I          |         | IC8230                | 409 441 8426         | IC LA7217M-T-TRM        |
| C8201                 | 404 084 <b>29</b> 03 | ELECT 1000U I        |         |                       |                      |                         |
| C8202                 | 404 084 3702         | ELECT 0.47U I        |         |                       | COILS                |                         |
| C8203                 | 403 235 0904         | CERAMIC 180P         |         | L1201                 | 645 008 2276         | INDUCTOR, 22U K         |
| C8204                 | 403 234 9700         | CERAMIC 12P          |         | L7002                 | 645 040 3101         | INDUCTOR, 3.3U M        |
| C8205                 | 403 235 6203         | CERAMIC 0.01U        |         | L7002                 | 645 026 1008         | INDUCTOR, 3.3U M        |
| C8206                 | 403 235 1406         | CERAMIC 470P         |         | L7003                 | 645 040 3101         | INDUCTOR, 3.3U M        |
| C8207                 | 403 235 0607         | CERAMIC 100P         |         |                       | 645 026 1008         | INDUCTOR, 3.3U M        |
| C8208                 | 404 084 4204         | ELECT 4.7U M         |         | L7004                 | 645 040 3101         | INDUCTOR, 3.3U M        |
| C8209                 | 404 084 6901         | NP-ELECT 1U N        |         |                       | 645 026 1008         | INDUCTOR, 3.3U M        |
| C8210                 | 403 235 5909         | CERAMIC 8200P        |         | L7007                 | 645 021 1607         | INDUCTOR, 10U J         |
| C8211                 | 404 084 3702         | ELECT 0.47U N        |         |                       | 645 032 8213         | INDUCTOR, 10U J         |
| C8212                 | 403 224 5903         | CERAMIC 3300P I      |         | L7061                 | 645 025 7797         | INDUCTOR, 120 OHM       |
| C8213                 | 404 084 3801         | ELECT 1U N           |         | L7101                 | 645 040 3064         | INDUCTOR, 10U K         |
| C8214                 | 403 235 6203         | CERAMIC 0.01U 2      |         |                       | 645 026 0964         | INDUCTOR, 10U K         |
| C8216                 | 403 279 0106         | CERAMIC 0.1U         |         | L7102                 | 645 040 3064         | INDUCTOR, 10U K         |
| C8217                 | 404 084 5508         | MT-POLYEST 0.1U      |         |                       | 645 026 0964         | INDUCTOR, 10U K         |
| C8217                 | 403 237 8007         | MT-COMPO 0.1U        |         | L7103                 | 645 040 3064         | INDUCTOR, 10U K         |
| C8219                 | 404 084 2903         | ELECT 1000U M        | 1 16V   |                       | 645 026 0964         | INDUCTOR, 10U K         |
| C8227                 | 403 235 1307         | CERAMIC 390P         | J 50V   | L7105                 | 645 025 7797         | INDUCTOR, 120 OHM       |
| C8230                 | 404 092 3701         | MT-POLYEST 0.27U     | J 63V   | L7106                 | 645 025 7797         | INDUCTOR, 120 OHM       |
| C8230                 | 403 219 4904         | MT-COMPO 0.27U       | J 50V   | L7108                 | 645 025 7797         | INDUCTOR, 120 OHM       |
| C8231                 | 403 235 6203         | CERAMIC 0.01U Z      | Z 50V   | L7110                 | 645 025 7797         | INDUCTOR, 120 OHM       |
| C8232                 | 403 235 6203         | CERAMIC 0.01U Z      |         | L7112                 | 645 040 3101         | INDUCTOR, 3.3U M        |
| C8233                 | 403 309 1202         | CERAMIC 0.056U K     |         |                       | 645 026 1008         | INDUCTOR, 3.3U M        |
| C8234                 | 403 235 6203         | CERAMIC 0.01U Z      |         | L7119                 | 645 021 1621         | INDUCTOR, 15U J         |
| C8235                 | 403 062 7107         | POLYESTER 0.056U K   |         |                       | 645 030 5627         | INDUCTOR, 15U J         |
| C8235                 | 403 179 0503         | POLYESTER 0.056U K   |         | L7120                 | 645 025 7797         | INDUCTOR, 120 OHM       |
| C8236                 | 403 235 4704         | CERAMIC 330P K       |         | L7121                 | 645 025 7797         | INDUCTOR, 120 OHM       |
| C8237                 | 404 084 6901         | NP-ELECT 1U M        |         | L7139                 | 645 025 7797         | INDUCTOR, 120 OHM       |
| C8238                 | 404 092 3701         | MT-POLYEST 0.27U J   |         | L7152                 | 645 025 7797         | INDUCTOR, 120 OHM       |
| C8238                 | 403 219 4904         | MT-COMPO 0.27U J     | 50V     | L7154                 | 645 025 7797         | INDUCTOR, 120 OHM       |
| C8239                 | 403 235 5206         | CERAMIC 820P K       | 50V     | L7156                 | 645 025 7797         | INDUCTOR, 120 OHM       |
| C8240                 | 404 084 3801         | ELECT 1U M           | 50V     | L7162                 | 645 036 3894         | INDUCTOR, 220 OHM       |
| C8241                 | 403 057 0601         | POLYESTER 0.01U K    | 50V     | L7163                 | 645 036 3894         | INDUCTOR, 220 OHM       |
| C8241                 | 403 179 3801         | POLYESTER 0.01U K    | 50V     | L7164                 | 645 025 7797         | INDUCTOR, 120 OHM       |
| C8242                 | 404 084 3207         | ELECT 47U M          | 16V     | L7165                 | 645 025 7797         | INDUCTOR, 120 OHM       |
| C8243                 | 404 084 3207         | ELECT 47U M          | 16V     | L8201                 | 645 008 2221         | INDUCTOR, 2.2U K        |
|                       |                      |                      |         | L8203                 | 645 021 1768         | INDUCTOR, 6.8U J        |
|                       | DIODES               |                      |         |                       | 645 037 1622         | INDUCTOR, 6.8U J        |
| D1054                 | 407 206 5608         | ZENER DIODE UDZS10   |         | L8218                 | 645 008 2221         | INDUCTOR, 2.2U K        |
|                       | 407 206 5608         | ZENER DIODE UDZ\$101 |         | L8220                 | 401 150 6001         | MT-GLAZE 0.000 ZA 1/10W |
|                       | 407 206 5608         | ZENER DIODE UDZS10   |         | L8221                 | 401 150 6001         | MT-GLAZE 0.000 ZA 1/10W |
|                       | 407 206 5608         | ZENER DIODE UDZS108  | B TE-17 | L8227                 | 645 021 <b>1</b> 607 | INDUCTOR, 10U J         |
|                       | 407 149 0807         | DIODE 1SS355 TE-17   |         |                       | 645 032 8213         | INDUCTOR, 10U J         |
|                       | 407 149 0807         | DIODE 1SS355 TE-17   |         |                       |                      | ,                       |
|                       | 407 231 8506         | ZD UDZS3.0B-TE-17    |         |                       |                      |                         |
|                       | 407 149 0807         | DIODE 1SS355 TE-17   |         |                       | TRANSISTOR           | RS                      |
|                       | 407 149 0807         | DIODE 1SS355 TE-17   |         | Q1202                 | 405 134 5925         | TR 2SA1037AK T146 R     |
| 08230                 | 407 149 0807         | DIODE 1SS355 TE-17   |         |                       | 405 147 2205         | TR 2SA1037AK T146 S     |
|                       |                      |                      |         |                       | 405 002 0308         | TR 2SA1037K-T-96-R      |
|                       |                      |                      |         |                       | 405 002 0407         | TR 2SA1037K-T-96-S      |
|                       | INTEGRATED           |                      |         |                       | 405 002 6726         | TR 2SA1179-M6           |
|                       | 409 419 5406         | IC MM1313BD          |         |                       | 405 002 6924         | TR 2SA1179-M7-TB        |
|                       | 409 444 4722         | IC NJM2534M-TE2      |         |                       | 405 163 1503         | TR 2SA1179N-M6-TB       |
|                       | 409 124 5708         | IC L78M09T-TL        |         |                       | 405 163 2708         | TR 2SA1179N-M7-TB       |
| C7101                 | 409 515 9803         | IC UPD64083GF-3BA    |         |                       | 405 173 9605         | TR 2SA1235A1E           |
|                       | 409 437 4801         | IC L88M33TL-TL       |         |                       |                      |                         |

| Location   | Part No.     | Description         | Schemat<br>Location |                              | Descriptio          |
|--|--------------|---------------------|---------------------|------------------------------|---------------------|
| Q1223  | 405 134 5925 |                     |                     | 405 173 9803                 | TR 2SC3928A1R       |
| Q1224 4 Q1224 4 Q1224 4 Q1224 4 Q1232 40 Q1232 40 Q1233 40 Q1234 40 Q1234 40 Q1234 40 Q1235 40 Q125 | 405 147 2205 | TR 2SA1037AK T146 S |                     | 405 173 9902                 | -000020;[]][        |
|  | 405 002 0308 | TR 2SA1037K-T-96-R  | Q7012               | 405 134 5925                 |                     |
|  | 405 002 0407 | TR 2SA1037K-T-96-S  | 0.012               | 405 147 2205                 |                     |
|  | 405 002 6726 | TR 2SA1179-M6       |                     |                              |                     |
|  | 405 002 6924 | TR 2SA1179-M7-TB    |                     | 405 002 0308                 |                     |
|  | 405 163 1503 | TR 2SA1179N-M6-TB   |                     | 405 002 0407                 |                     |
|  | 405 163 2708 | TR 2SA1179N-M7-TB   |                     | 405 002 6726                 |                     |
|  | 405 173 9605 | TR 2SA1235A1E       |                     | 405 002 6924                 |                     |
|  | 405 173 9704 | TR 2SA1235A1F       |                     | 405 163 1503                 | TR 2SA1179N-M6-TB   |
| Q1224  | 405 134 5925 | TR 2SA1037AK T146 R |                     | 405 163 2708                 | TR 2SA1179N-M7-TB   |
| WILLY  | 405 147 2205 |                     |                     | 405 173 9605                 | TR 2SA1235A1E       |
|  | 405 002 0308 | TR 2SA1037AK T146 S |                     | 405 173 9704                 | TR 2SA1235A1F       |
|  |              | TR 2SA1037K-T-96-R  | Q7013               | 405 134 5925                 | TR 2SA1037AK T146   |
|  | 405 002 0407 | TR 2SA1037K-T-96-S  |                     | 405 147 2205                 | TR 2SA1037AK T146   |
|  | 405 002 6726 | TR 2SA1179-M6       |                     | 405 002 0308                 | TR 2SA1037K-T-96-R  |
|  | 405 002 6924 | TR 2SA1179-M7-TB    |                     | 405 002 0407                 | TR 2SA1037K-T-96-S  |
|  | 405 163 1503 | TR 2SA1179N-M6-TB   | •                   | 405 002 6726                 | TR 2SA1179-M6       |
|  | 405 163 2708 | TR 2SA1179N-M7-TB   |                     | 405 002 6924                 |                     |
|  | 405 173 9605 | TR 2SA1235A1E       |                     | 405 163 1503                 | TR 2SA1179-M7-TB    |
| _  | 405 173 9704 | TR 2SA1235A1F       |                     |                              | TR 2SA1179N-M6-TB   |
| Q1232  | 405 014 4509 | TR 2SC2412K-T-96-R  |                     | 405 163 2708                 | TR 2SA1179N-M7-TB   |
| Q1202  | 405 014 4608 | TR 2SC2412K-T-96-S  |                     | 405 173 9605                 | TR 2SA1235A1E       |
|  | 405 015 8724 | TR 2SC2812-L6-TB    | 07000               | 405 173 9704                 | TR 2SA1235A1F       |
| •  | 405 015 8922 | TR 2SC2812-L7-TB    | Q7020               | 405 134 5925                 | TR 2SA1037AK T146 R |
|  | 405 163 1602 | TR 2SC2812N-L6-TB   |                     | 405 147 2205                 | TR 2SA1037AK T146 S |
|  | 405 163 1701 | TR 2SC2812N-L7-TB   |                     | 405 002 0308                 | TR 2SA1037K-T-96-R  |
|  | 405 173 9803 | TR 2SC3928A1R       |                     | 405 002 0407                 | TR 2SA1037K-T-96-S  |
|  | 405 173 9902 | TR 2SC3928A1S       |                     | 405 002 6726                 | TR 2SA1179-M6       |
| 1233   | 405 014 4509 | TR 2SC2412K-T-96-R  |                     | 405 002 6924                 | TR 2SA1179-M7-TB    |
|  | 405 014 4608 | TR 2SC2412K-T-96-S  |                     | 405 163 1503                 | TR 2SA1179N-M6-TB   |
|  | 405 015 8724 |                     |                     | 405 163 2708                 | TR 2SA1179N-M7-TB   |
|  | 405 015 8922 | TR 2SC2812-L6-TB    |                     | 405 173 9605                 | TR 2SA1235A1E       |
|  | 405 163 1602 | TR 2SC2812-L7-TB    |                     | 405 173 9704                 | TR 2SA1235A1F       |
|  | 405 163 1701 | TR 2SC2812N-L6-TB   | Q7021               | 405 014 4509                 | TR 2SC2412K-T-96-R  |
|  |              | TR 2SC2812N-L7-TB   |                     | 405 014 4608                 | TR 2SC2412K-T-96-S  |
|  | 405 173 9803 | TR 2SC3928A1R       |                     | 405 015 8724                 | TR 2SC2812-L6-TB    |
| ***  | 405 173 9902 | TR 2SC3928A1S       |                     | 405 015 8922                 | TR 2SC2812-L7-TB    |
|  | 405 014 4509 | TR 2SC2412K-T-96-R  |                     | 405 163 1602                 | TR 2SC2812N-L6-TB   |
|  | 405 014 4608 | TR 2SC2412K-T-96-S  |                     | 405 163 1701                 | TR 2SC2812N-L7-TB   |
|  | 405 015 8724 | TR 2SC2812-L6-TB    |                     | 405 173 9803                 | TR 2SC3928A1R       |
| 010  | 405 015 8922 | TR 2SC2812-L7-TB    |                     | 405 173 9902                 | TR 2SC3928A1S       |
|  | 105 163 1602 | TR 2SC2812N-L6-TB   | Q7022               | 405 134 5925                 |                     |
| 4  | 105 163 1701 | TR 2SC2812N-L7-TB   | 0.7022              | 405 147 2205                 | TR 2SA1037AK T146 R |
| 4  | 105 173 9803 | TR 2SC3928A1R       |                     | 405 002 0308                 | TR 2SA1037AK T146 S |
|  | 05 173 9902  | TR 2SC3928A1S       |                     |                              | TR 2SA1037K-T-96-R  |
| <b>'0</b> 10 4   | 05 134 5925  | TR 2SA1037AK T146 R |                     | 405 002 0407                 | TR 2SA1037K-T-96-S  |
|  | 05 147 2205  | TR 2SA1037AK T146 S |                     | 405 002 6726                 | TR 2SA1179-M6       |
|  | 05 002 0308  | TR 2SA1037K-T-96-R  |                     | 405 002 6924                 | TR 2SA1179-M7-TB    |
|  | 05 002 0407  | TR 2SA1037K-T-96-S  |                     | 405 163 1503                 | TR 2SA1179N-M6-TB   |
| 4<br>4<br>4<br>4   | 05 002 6726  | TR 2SA1179-M6       |                     | 405 163 2708                 | TR 2SA1179N-M7-TB   |
|  | 05 002 6924  | TR 2SA1179-M7-TB    |                     | 405 173 9605                 | TR 2SA1235A1E       |
|  | 05 163 1503  | TR 2SA1179N-M6-TB   |                     | 405 173 9704                 | TR 2SA1235A1F       |
|  | 05 163 2708  |                     | Q7023               | 405 134 5925                 | TR 2SA1037AK T146 R |
|  | 05 173 9605  | TR 2SA1179N-M7-TB   |                     | 405 147 2205                 | TR 2SA1037AK T146 S |
|  |              | TR 2SA1235A1E       |                     | 405 002 0308                 | TR 2SA1037K-T-96-R  |
|  | 05 173 9704  | TR 2SA1235A1F       |                     | 405 002 0407                 | TR 2SA1037K-T-96-S  |
|  | 05 014 4509  | TR 2SC2412K-T-96-R  |                     | 405 002 6726                 | TR 2SA1179-M6       |
| 40   |              | TR 2SC2412K-T-96-S  |                     | 405 002 6924                 | TR 99841170 MAT TO  |
|  |              | TR 2SC2812-L6-TB    |                     | 405 163 1503                 | TR 2SA1179-M7-TB    |
|  | 05 015 8922  | TR 2SC2812-L7-TB    |                     |                              | TR 2SA1179N-M6-TB   |
| 40   | 05 163 1602  | TR 2SC2812N-L6-TB   |                     | 405 163 2708                 | TR 2SA1179N-M7-TB   |
|  | _            | TR 2SC2812N-L7-TB   |                     | 405 173 9605<br>405 173 9704 | TR 2SA1235A1E       |

| Schematic Location | Part No.     | Description         | Schematic<br>Location | Part No.     | Description         |  |
|--------------------|--------------|---------------------|-----------------------|--------------|---------------------|--|
| Q7030              | 405 134 5925 | TR 2SA1037AK T146 R | Q7100                 | 405 134 5925 | TR 2SA1037AK T146 R |  |
|                    | 405 147 2205 | TR 2SA1037AK T146 S |                       | 405 147 2205 | TR 2SA1037AK T146 S |  |
|                    | 405 002 0308 | TR 2SA1037K-T-96-R  |                       | 405 002 0308 | TR 2SA1037K-T-96-R  |  |
|                    | 405 002 0407 | TR 2SA1037K-T-96-S  |                       | 405 002 0407 | TR 2SA1037K-T-96-S  |  |
|                    | 405 002 6726 | TR 2SA1179-M6       |                       | 405 002 6726 | TR 2SA1179-M6       |  |
|                    | 405 002 6924 | TR 2SA1179-M7-TB    |                       | 405 002 6924 | TR 2SA1179-M7-TB    |  |
|                    | 405 163 1503 | TR 2SA1179N-M6-TB   |                       | 405 163 1503 | TR 2SA1179N-M6-TB   |  |
|                    | 405 163 2708 | TR 2SA1179N-M7-TB   |                       | 405 163 2708 | TR 2SA1179N-M7-TB   |  |
|                    | 405 173 9605 | TR 2SA1235A1E       |                       | 405 173 9605 | TR 2SA1235A1E       |  |
|                    | 405 173 9704 | TR 2SA1235A1F       |                       | 405 173 9704 | TR 2SA1235A1F       |  |
| Q7031              | 405 014 4509 | TR 2SC2412K-T-96-R  | Q7101                 | 405 134 5925 | TR 2SA1037AK T146 R |  |
| 47001              | 405 014 4608 | TR 2SC2412K-T-96-S  |                       | 405 147 2205 | TR 2SA1037AK T146 S |  |
|                    | 405 015 8724 | TR 2SC2812-L6-TB    |                       | 405 002 0308 | TR 2SA1037K-T-96-R  |  |
|                    | 405 015 8922 | TR 2SC2812-L7-TB    |                       | 405 002 0407 | TR 2SA1037K-T-96-S  |  |
|                    | 405 163 1602 | TR 2SC2812N-L6-TB   |                       | 405 002 6726 | TR 2SA1179-M6       |  |
|                    | 405 163 1701 | TR 2SC2812N-L7-TB   |                       | 405 002 6924 | TR 2SA1179-M7-TB    |  |
|                    | 405 173 9803 | TR 2SC3928A1R       |                       | 405 163 1503 | TR 2SA1179N-M6-TB   |  |
|                    | 405 173 9803 | TR 2SC3928A1S       |                       | 405 163 2708 | TR 2SA1179N-M7-TB   |  |
| 07022              | 405 173 9902 | TR 2SC2412K-T-96-R  |                       | 405 173 9605 | TR 2SA1235A1E       |  |
| Q7032              |              | TR 2SC2412K-T-96-S  |                       | 405 173 9704 | TR 2SA1235A1F       |  |
|                    | 405 014 4608 |                     | 00007                 |              | TR 2SC2412K-T-96-R  |  |
|                    | 405 015 8724 | TR 2SC2812-L6-TB    | Q8227                 | 405 014 4509 |                     |  |
|                    | 405 015 8922 | TR 2SC2812-L7-TB    |                       | 405 014 4608 | TR 2SC2412K-T-96-S  |  |
|                    | 405 163 1602 | TR 2SC2812N-L6-TB   |                       | 405 015 8724 | TR 2SC2812-L6-TB    |  |
|                    | 405 163 1701 | TR 2SC2812N-L7-TB   |                       | 405 015 8922 | TR 2SC2812-L7-TB    |  |
|                    | 405 173 9803 | TR 2SC3928A1R       |                       | 405 163 1602 | TR 2SC2812N-L6-TB   |  |
|                    | 405 173 9902 | TR 2SC3928A1S       |                       | 405 163 1701 | TR 2SC2812N-L7-TB   |  |
| Q7033              | 405 014 4509 | TR 2SC2412K-T-96-R  |                       | 405 173 9803 | TR 2SC3928A1R       |  |
|                    | 405 014 4608 | TR 2SC2412K-T-96-S  |                       | 405 173 9902 | TR 2SC3928A1S       |  |
|                    | 405 015 8724 | TR 2SC2812-L6-TB    | Q8230                 | 405 014 4509 | TR 2SC2412K-T-96-R  |  |
|                    | 405 015 8922 | TR 2SC2812-L7-TB    |                       | 405 014 4608 | TR 2SC2412K-T-96-S  |  |
|                    | 405 163 1602 | TR 2SC2812N-L6-TB   |                       | 405 015 8724 | TR 2SC2812-L6-TB    |  |
|                    | 405 163 1701 | TR 2SC2812N-L7-TB   |                       | 405 015 8922 | TR 2SC2812-L7-TB    |  |
|                    | 405 173 9803 | TR 2SC3928A1R       |                       | 405 163 1602 | TR 2SC2812N-L6-TB   |  |
|                    | 405 173 9902 | TR 2SC3928A1S       |                       | 405 163 1701 | TR 2SC2812N-L7-TB   |  |
| Q7034              | 405 134 5925 | TR 2SA1037AK T146 R |                       | 405 173 9803 | TR 2SC3928A1R       |  |
|                    | 405 147 2205 | TR 2SA1037AK T146 S |                       | 405 173 9902 | TR 2SC3928A1S       |  |
|                    | 405 002 0308 | TR 2SA1037K-T-96-R  | Q8231                 | 405 014 4509 | TR 2SC2412K-T-96-R  |  |
|                    | 405 002 0407 | TR 2SA1037K-T-96-S  |                       | 405 014 4608 | TR 2SC2412K-T-96-S  |  |
|                    | 405 002 6726 | TR 2SA1179-M6       |                       | 405 015 8724 | TR 2SC2812-L6-TB    |  |
|                    | 405 002 6924 | TR 2SA1179-M7-TB    |                       | 405 015 8922 | TR 2SC2812-L7-TB    |  |
|                    | 405 163 1503 | TR 2SA1179N-M6-TB   |                       | 405 163 1602 | TR 2SC2812N-L6-TB   |  |
|                    | 405 163 2708 | TR 2SA1179N-M7-TB   |                       | 405 163 1701 | TR 2SC2812N-L7-TB   |  |
|                    | 405 173 9605 | TR 2SA1235A1E       |                       | 405 173 9803 | TR 2SC3928A1R       |  |
|                    | 405 173 9704 | TR 2SA1235A1F       |                       | 405 173 9902 | TR 2SC3928A1S       |  |
| Q7035              | 405 014 4509 | TR 2SC2412K-T-96-R  | Q8232                 | 405 134 5925 | TR 2SA1037AK T146 R |  |
|                    | 405 014 4608 | TR 2SC2412K-T-96-S  |                       | 405 147 2205 | TR 2SA1037AK T146 S |  |
|                    | 405 015 8724 | TR 2SC2812-L6-TB    |                       | 405 002 0308 | TR 2SA1037K-T-96-R  |  |
|                    | 405 015 8922 | TR 2SC2812-L7-TB    |                       | 405 002 0407 | TR 2SA1037K-T-96-S  |  |
|                    | 405 163 1602 | TR 2SC2812N-L6-TB   |                       | 405 002 6726 | TR 2SA1179-M6       |  |
|                    | 405 163 1701 | TR 2SC2812N-L7-TB   |                       | 405 002 6924 | TR 2SA1179-M7-TB    |  |
|                    | 405 173 9803 | TR 2SC3928A1R       |                       | 405 163 1503 | TR 2SA1179N-M6-TB   |  |
|                    | 405 173 9902 | TR 2SC3928A1S       |                       | 405 163 2708 | TR 2SA1179N-M7-TB   |  |
| Q7036              | 405 014 4509 | TR 2SC2412K-T-96-R  |                       | 405 173 9605 | TR 2SA1235A1E       |  |
| Q1030              | 405 014 4608 | TR 2SC2412K-T-96-S  |                       | 405 173 9704 | TR 2SA1235A1F       |  |
|                    |              |                     | Q8233                 | 405 014 4509 | TR 2SC2412K-T-96-R  |  |
|                    | 405 015 8724 | TR 2SC2812-L6-TB    | U0233                 | 405 014 4608 | TR 2SC2412K-T-96-S  |  |
|                    | 405 015 8922 | TR 2SC2812-L7-TB    |                       | 405 015 8724 | TR 2SC2812-L6-TB    |  |
|                    | 405 163 1602 | TR 2SC2812N-L6-TB   |                       |              |                     |  |
|                    | 405 163 1701 | TR 2SC2812N-L7-TB   |                       | 405 015 8922 | TR 2SC2812-L7-TB    |  |
|                    | 405 173 9803 | TR 2SC3928A1R       |                       | 405 163 1602 | TR 2SC2812N-L6-TB   |  |
|                    | 405 173 9902 | TR 2SC3928A1S       |                       | 405 163 1701 | TR 2SC2812N-L7-TB   |  |

| Schematic<br>Location                     | Part No.     | Description         | Description Schematic Location |              | De        | Description   |  |
|---|--------------|---------------------|--------------------------------|--------------|-----------|---------------|--|
| Q8233 (Cont.)405 173 9803<br>405 173 9902 |              | TR 2SC3928A1R       |                                | 405 173 9803 |           |               |  |
| 00004                                     |              | TR 2SC3928A1S       |                                | 405 173 9902 | TR 2SC392 | 8A1S          |  |
| Q8234                                     | 405 014 4509 | TR 2SC2412K-T-96-R  |                                |              |           |               |  |
|   | 405 014 4608 | TR 2SC2412K-T-96-S  | Diani                          | RESISTOR     |           |               |  |
|   | 405 015 8724 | TR 2SC2812-L6-TB    | R1001                          | 401 256 2709 | MT-GLAZE  | 75 JA 1/10    |  |
|   | 405 015 8922 | TR 2SC2812-L7-TB    | R1002                          | 401 162 2909 | MT-GLAZE  | 220 JA 1/10   |  |
|   | 405 163 1602 | TR 2SC2812N-L6-TB   | R1003                          | 401 162 3807 | MT-GLAZE  | 470K JA 1/10  |  |
|   | 405 163 1701 | TR 2SC2812N-L7-TB   | R1004                          | 401 162 2800 | MT-GLAZE  | 1.8K JA 1/10  |  |
|   | 405 173 9803 | TR 2SC3928A1R       | R1005                          | 401 162 3807 | MT-GLAZE  | 470K JA 1/10  |  |
|   | 405 173 9902 | TR 2SC3928A1S       | R1006                          | 401 162 2800 | MT-GLAZE  | 1.8K JA 1/10  |  |
| Q8235                                     | 405 014 4509 | TR 2SC2412K-T-96-R  | R1007                          | 401 256 2709 | MT-GLAZE  | 75 JA 1/10    |  |
|   | 405 014 4608 | TR 2SC2412K-T-96-S  | R1008                          | 401 162 2909 | MT-GLAZE  | 220 JA 1/10   |  |
|   | 405 015 8724 | TR 2SC2812-L6-TB    | R1009                          | 401 162 3807 | MT-GLAZE  | 470K JA 1/10  |  |
|   | 405 015 8922 | TR 2SC2812-L7-TB    | R1010                          | 401 162 2800 | MT-GLAZE  | 1.8K JA 1/10  |  |
|   | 405 163 1602 | TR 2SC2812N-L6-TB   | R1011                          | 401 162 3807 | MT-GLAZE  | 470K JA 1/10  |  |
|   | 405 163 1701 | TR 2SC2812N-L7-TB   | R1012                          | 401 162 2800 | MT-GLAZE  | 1.8K JA 1/10  |  |
|   | 405 173 9803 | TR 2SC3928A1R       | R1015                          | 401 162 3807 | MT-GLAZE  | 470K JA 1/10  |  |
| 0000-                                     | 405 173 9902 | TR 2SC3928A1S       | R1016                          | 401 162 2800 | MT-GLAZE  | 1.8K JA 1/10  |  |
| Q8236                                     | 405 014 4509 | TR 2SC2412K-T-96-R  | R1017                          | 401 162 3807 | MT-GLAZE  | 470K JA 1/10  |  |
|   | 405 014 4608 | TR 2SC2412K-T-96-S  | R1018                          | 401 162 2800 | MT-GLAZE  | 1.8K JA 1/10  |  |
|   | 405 015 8724 | TR 2SC2812-L6-TB    | R1051                          | 401 256 2709 | MT-GLAZE  | 75 JA 1/10    |  |
|   | 405 015 8922 | TR 2SC2812-L7-TB    | R1052                          | 401 162 2909 | MT-GLAZE  | 220 JA 1/10   |  |
|   | 405 163 1602 | TR 2SC2812N-L6-TB   | R1056                          | 401 256 2709 | MT-GLAZE  | 75 JA 1/10    |  |
|   | 405 163 1701 | TR 2SC2812N-L7-TB   | R1057                          | 401 162 2909 | MT-GLAZE  | 220 JA 1/10   |  |
|   | 405 173 9803 | TR 2SC3928A1R       | R1058                          | 401 162 3005 | MT-GLAZE  | 22K JA 1/10   |  |
| 0000=                                     | 405 173 9902 | TR 2SC3928A1S       | R1059                          | 401 150 6209 | MT-GLAZE  | 1K JA 1/10    |  |
|   | 405 134 5925 | TR 2SA1037AK T146 R | R1060                          | 401 256 2709 | MT-GLAZE  | 75 JA 1/10    |  |
|   | 405 147 2205 | TR 2SA1037AK T146 S | R1061                          | 401 162 2909 | MT-GLAZE  | 220 JA 1/10   |  |
|   | 405 002 0308 | TR 2SA1037K-T-96-R  | R1062                          | 401 256 2709 | MT-GLAZE  | 75 JA 1/10\   |  |
|   | 405 002 0407 | TR 2SA1037K-T-96-S  | R1063                          | 401 162 2909 | MT-GLAZE  | 220 JA 1/10   |  |
|   | 405 002 6726 | TR 2SA1179-M6       | R1064                          | 401 162 3005 | MT-GLAZE  | 22K JA 1/10   |  |
|   | 405 002 6924 | TR 2SA1179-M7-TB    | R1065                          | 401 150 6209 | MT-GLAZE  | 1K JA 1/10    |  |
|   | 405 163 1503 | TR 2SA1179N-M6-TB   | R1202                          | 401 256 4109 | MT-GLAZE  | 56 JA 1/10\   |  |
|   | 405 163 2708 | TR 2SA1179N-M7-TB   | R1203                          | 401 256 4109 | MT-GLAZE  | 56 JA 1/10\   |  |
|   | 405 173 9605 | TR 2SA1235A1E       | R1204                          | 401 256 4109 | MT-GLAZE  | 56 JA 1/10\   |  |
| Q8238                                     | 405 173 9704 | TR 2SA1235A1F       | R1205                          | 401 256 4109 | MT-GLAZE  | 56 JA 1/10\   |  |
| Q0230                                     | 405 134 5925 | TR 2SA1037AK T146 R | R1206                          | 401 150 6100 | MT-GLAZE  | 2.2K JA 1/10V |  |
|   | 405 147 2205 | TR 2SA1037AK T146 S | R1207                          | 401 150 6100 | MT-GLAZE  | 2.2K JA 1/10V |  |
|   | 405 002 0308 | TR 2SA1037K-T-96-R  | R1209                          | 401 150 6209 | MT-GLAZE  | 1K JA 1/10V   |  |
|   | 405 002 0407 | TR 2SA1037K-T-96-S  | R1214                          | 401 255 6500 | MT-GLAZE  | 100 JA 1/10V  |  |
|   | 405 002 6726 | TR 2SA1179-M6       | R1215                          | 401 255 6500 | MT-GLAZE  | 100 JA 1/10V  |  |
|   | 405 002 6924 | TR 2SA1179-M7-TB    | R1216                          | 401 255 6500 | MT-GLAZE  | 100 JA 1/10V  |  |
|   | 405 163 1503 | TR 2SA1179N-M6-TB   | R1217                          | 401 255 6500 | MT-GLAZE  | 100 JA 1/10V  |  |
|   | 405 163 2708 | TR 2SA1179N-M7-TB   | R1219                          | 401 256 4109 | MT-GLAZE  | 56 JA 1/10V   |  |
|   | 405 173 9605 | TR 2SA1235A1E       | R1220                          | 401 256 4109 | MT-GLAZE  | 56 JA 1/10V   |  |
| Q8239                                     | 405 173 9704 | TR 2SA1235A1F       | R1221                          | 401 150 6209 | MT-GLAZE  | 1K JA 1/10V   |  |
| Q0239                                     | 405 014 4509 | TR 2SC2412K-T-96-R  | R1222                          | 401 150 6209 | MT-GLAZE  | 1K JA 1/10V   |  |
| 4<br>4<br>4<br>4                          | 405 014 4608 | TR 2SC2412K-T-96-S  | R1223                          | 401 150 6209 | MT-GLAZE  | 1K JA 1/10V   |  |
|   | 405 015 8724 | TR 2SC2812-L6-TB    | R1224                          | 401 150 6209 | MT-GLAZE  | 1K JA 1/10W   |  |
|   | 405 015 8922 | TR 2SC2812-L7-TB    | R1228                          | 401 256 4109 | MT-GLAZE  | 56 JA 1/10W   |  |
|   | 405 163 1602 | TR 2SC2812N-L6-TB   | R1229                          | 401 256 4109 | MT-GLAZE  | 56 JA 1/10W   |  |
|   | 405 163 1701 | TR 2SC2812N-L7-TB   | R1239                          | 401 256 4109 | MT-GLAZE  | 56 JA 1/10W   |  |
|   | 405 173 9803 | TR 2SC3928A1R       | R1240                          | 401 150 5905 | MT-GLAZE  | 10K JA 1/10W  |  |
|   | 405 173 9902 | TR 2SC3928A1S       | R1241                          | 401 150 6209 | MT-GLAZE  | 1K JA 1/10W   |  |
|   | 405 014 4509 | TR 2SC2412K-T-96-R  | R1242                          | 401 256 4109 | MT-GLAZE  | 56 JA 1/10W   |  |
|   | 405 014 4608 | TR 2SC2412K-T-96-S  | R1243                          | 401 150 6209 | MT-GLAZE  | 1K JA 1/10W   |  |
|   | 405 015 8724 | TR 2SC2812-L6-TB    | R1244                          | 401 256 4109 | MT-GLAZE  | 56 JA 1/10W   |  |
|   | 405 015 8922 | TR 2SC2812-L7-TB    | R1245                          | 401 256 4109 | MT-GLAZE  | 56 JA 1/10W   |  |
|   | 405 163 1602 | TR 2SC2812N-L6-TB   | R1246                          | 401 150 6209 | MT-GLAZE  | 1K JA 1/10W   |  |
|   | 405 163 1701 | TR 2SC2812N-L7-TB   | R1247                          | 401 256 4109 | MT-GLAZE  | 56 JA 1/10W   |  |

|                       |                              |                      |                               |                       |              |              | · · · · · · · · · · · · · · · · · · · |  |
|-----------------------|------------------------------|----------------------|-------------------------------|-----------------------|--------------|--------------|---------------------------------------|--|
| Schematic<br>Location | Part No.                     | Des                  | scription                     | Schematic<br>Location | Part No.     | Description  |                                       |  |
| R7010                 | 401 150 6209                 | MT-GLAZE             | 1K JA 1/10W                   | R8215                 | 401 256 4109 | MT-GLAZE     | 56 JA 1/10W                           |  |
| R7011                 | 401 162 3708                 | MT-GLAZE             | 4.7K JA 1/10W                 | R8216                 | 401 256 4109 | MT-GLAZE     | 56 JA 1/10W                           |  |
| R7012                 | 401 162 4002                 | MT-GLAZE             | 560 JA 1/10W                  | R8217                 | 401 256 4109 | MT-GLAZE     | 56 JA 1/10W                           |  |
| R7013                 | 401 162 4101                 | MT-GLAZE             | 5.6K JA 1/10W                 | R8227                 | 401 150 6209 | MT-GLAZE     | 1K JA 1/10W                           |  |
| R7014                 | 401 150 6209                 | MT-GLAZE             | 1K JA 1/10W                   | R8228                 | 401 162 3005 | MT-GLAZE     | 22K JA 1/10W                          |  |
| R7015                 | 401 162 2909                 | MT-GLAZE             | 220 JA 1/10W                  | R8229                 | 401 162 3005 | MT-GLAZE     | 22K JA 1/10W                          |  |
| R7016                 | 401 256 0002                 | MT-GLAZE             | 120 JA 1/10W                  | R8230                 | 401 162 3807 | MT-GLAZE     | 470K JA 1/10W                         |  |
| R7017                 | 401 162 3609                 | MT-GLAZE             | 470 JA 1/10W                  | R8231                 | 401 255 6005 | MT-GLAZE     | 1M JA 1/10W                           |  |
| R7018                 | 401 256 5601                 | MT-GLAZE             | 47 JA 1/10W                   | R8232                 | 401 150 6100 | MT-GLAZE     | 2.2K JA 1/10W                         |  |
| R7019                 | 401 150 6209                 | MT-GLAZE             | 1K JA 1/10W                   | R8233                 | 401 150 6100 | MT-GLAZE     | 2.2K JA 1/10W                         |  |
| R7020                 | 401 150 6209                 | MT-GLAZE             | 1K JA 1/10W                   | R8234                 | 401 256 3607 | MT-GLAZE     | 15K JA 1/10W                          |  |
| R7021                 | 401 162 3708                 | MT-GLAZE             | 4.7K JA 1/10W                 | R8235                 | 401 256 7308 | MT-GLAZE     | 6.8K JA 1/10W                         |  |
| R7022                 | 401 162 4002                 | MT-GLAZE             | 560 JA 1/10W                  | R8236                 | 401 150 5905 | MT-GLAZE     | 10K JA 1/10W                          |  |
| R7023                 | 401 162 4101                 | MT-GLAZE             | 5.6K JA 1/10W                 | R8237                 | 401 150 6209 | MT-GLAZE     | 1K JA 1/10W                           |  |
| R7024                 | 401 162 2909                 | MT-GLAZE             | 220 JA 1/10W                  | R8238                 | 401 150 5905 | MT-GLAZE     | 10K JA 1/10W                          |  |
| R7025                 | 401 150 6209                 | MT-GLAZE             | 1K JA 1/10W                   | R8239                 | 401 256 3508 | MT-GLAZE     | 150K JA 1/10W                         |  |
| R7026                 | 401 162 3609                 | MT-GLAZE             | 470 JA 1/10W                  | R8240                 | 401 162 4002 | MT-GLAZE     | 560 JA 1/10W                          |  |
| R7027                 | 401 162 2909                 | MT-GLAZE             | 220 JA 1/10W                  | R8241                 | 401 162 3104 | MT-GLAZE     | 3.3K JA 1/10W                         |  |
| R7028                 | 401 256 5601                 | MT-GLAZE             | 47 JA 1/10W                   | R8242                 | 401 150 6209 | MT-GLAZE     | 1K JA 1/10W                           |  |
| R7029                 | 401 150 6209                 | MT-GLAZE             | 1K JA 1/10W                   | R8243                 | 401 256 7605 | MT-GLAZE     | 3.9K JA 1/10W                         |  |
| R7030                 | 401 256 2907                 | MT-GLAZE             | 150 JA 1/10W                  | R8244                 | 401 162 4002 | MT-GLAZE     | 560 JA 1/10W                          |  |
| R7031                 | 401 150 6100                 | MT-GLAZE             | 2.2K JA 1/10W                 | R8245                 | 401 162 4002 | MT-GLAZE     | 560 JA 1/10W                          |  |
| R7032                 | 401 256 6905                 | MT-GLAZE             | 680 JA 1/10W                  | R8246                 | 401 256 7605 | MT-GLAZE     | 3.9K JA 1/10W                         |  |
| R7033                 | 401 256 0309                 | MT-GLAZE             | 820 JA 1/10W                  | R8247                 | 401 150 5905 | MT-GLAZE     | 10K JA 1/10W                          |  |
| R7034                 | 401 150 6100                 | MT-GLAZE             | 2.2K JA 1/10W                 | R8248                 | 401 150 5806 | MT-GLAZE     | 100K JA 1/10W                         |  |
| R7035                 | 401 256 4109                 | MT-GLAZE             | 56 JA 1/10W                   | R8249                 | 401 162 3104 | MT-GLAZE     | 3.3K JA 1/10W                         |  |
| R7036                 | 401 256 7803                 | MT-GLAZE             | 390K JA 1/10W                 |                       | MISCELLANE   | OHE          |                                       |  |
| R7037                 | 401 162 4101                 | MT-GLAZE             | 5.6K JA 1/10W                 | A1201                 | 610 310 1781 | ASSY, PWB,   | Λ\/ _H3ΛRM                            |  |
| R7038                 | 401 162 3104                 | MT-GLAZE             | 3.3K JA 1/10W                 | K1001                 | 645 057 1725 | TERMINAL,    |                                       |  |
| R7039                 | 401 162 2909                 | MT-GLAZE             | 220 JA 1/10W                  | K1051                 | 645 041 1847 | SOCKET, DI   |                                       |  |
| R7040                 | 401 255 9501                 | MT-GLAZE             | 220K JA 1/10W                 | T7010                 | 645 028 2454 | FILTER, LP ( |                                       |  |
| R7041                 | 401 256 6301                 | MT-GLAZE             | 47K JA 1/10W                  | T7020                 | 645 028 2454 | FILTER, LP   |                                       |  |
| R7042                 | 401 150 6100                 | MT-GLAZE             | 2.2K JA 1/10W                 | T7030                 | 645 028 2447 | FILTER, LP   |                                       |  |
| R7043                 | 401 162 3609                 | MT-GLAZE             | 470 JA 1/10W                  | X7100                 | 610 221 3126 | CRYSTAL O    |                                       |  |
| R7044                 | 401 150 6209                 | MT-GLAZE             | 1K JA 1/10W                   | X8201                 | 645 024 8788 |              | AL 3.579545MHZ                        |  |
| R7045                 | 401 162 3708                 | MT-GLAZE             | 4.7K JA 1/10W                 | X8202                 | 610 012 0532 |              | /IC 500.0KHZ                          |  |
| R7046                 | 401 255 6500                 | MT-GLAZE<br>MT-GLAZE | 100 JA 1/10W<br>2.2K JA 1/10W | X8230                 | 645 006 3459 |              | /IC 500.0KHZ                          |  |
| R7047                 | 401 150 6100<br>401 162 2701 | MT-GLAZE             | 180 JA 1/10W                  | 7.0200                | 0.000000     | 000, 02      |                                       |  |
| R7048                 | 401 256 0002                 | MT-GLAZE             | 120 JA 1/10W                  |                       |              |              |                                       |  |
| R7100<br>R7101        | 401 162 2909                 | MT-GLAZE             | 220 JA 1/10W                  |                       | VIDEO PC I   | BOARD        |                                       |  |
| R7101                 | 401 162 3609                 | MT-GLAZE             | 470 JA 1/10W                  |                       |              |              |                                       |  |
| R7102<br>R7103        | 401 150 6209                 | MT-GLAZE             | 1K JA 1/10W                   |                       | CAPACITORS   |              |                                       |  |
| R7106                 | 401 162 3708                 | MT-GLAZE             | 4.7K JA 1/10W                 | C2301                 | 404 084 2705 | ELECT        | 10U M 16V                             |  |
| R7107                 | 401 255 6500                 | MT-GLAZE             | 100 JA 1/10W                  | C2302                 | 403 279 0106 | CERAMIC      | 0.1U Z 25V                            |  |
| R7107                 | 401 255 6500                 | MT-GLAZE             | 100 JA 1/10W                  | C2313                 | 404 084 2903 | ELECT        | 1000U M 16V                           |  |
| R7111                 | 401 162 3401                 | MT-GLAZE             | 39K JA 1/10W                  | C2314                 | 404 084 2903 | ELECT        | 1000U M 16V                           |  |
| R7112                 | 401 162 3708                 | MT-GLAZE             | 4.7K JA 1/10W                 | C2315                 | 403 279 0106 | CERAMIC      | 0.1U Z 25V                            |  |
| R7112<br>R7113        | 401 162 3401                 | MT-GLAZE             | 39K JA 1/10W                  | C2316                 | 403 279 0106 | CERAMIC      | 0.1U Z , 25V                          |  |
| R7113<br>R8201        | 401 256 5304                 | MT-GLAZE             | 56K JA 1/10W                  | C2317                 | 404 085 5002 | ELECT        | 47U M 25V                             |  |
| R8202                 | 401 162 2800                 | MT-GLAZE             | 1.8K JA 1/10W                 | C2318                 | 404 085 4203 | ELECT        | 100U M 10V                            |  |
| R8203                 | 401 152 3206                 | MT-GLAZE             | 330 JA 1/10W                  | C2319                 | 403 279 0106 | CERAMIC      | 0.1U Z 25V                            |  |
| R8205                 | 401 255 6500                 | MT-GLAZE             | 100 JA 1/10W                  | C2320                 | 403 279 0106 | CERAMIC      | 0.1U Z 25V                            |  |
| R8206                 | 401 162 2909                 | MT-GLAZE             | 220 JA 1/10W                  | C2321                 | 404 084 2507 | ELECT        | 47U M 10V                             |  |
| R8208                 | 401 255 6500                 | MT-GLAZE             | 100 JA 1/10W                  | C2323                 | 404 092 9208 | ELECT        | 1000U M 6.3V                          |  |
| R8209                 | 401 255 6500                 | MT-GLAZE             | 100 JA 1/10W                  | C2324                 | 404 092 9208 | ELECT        | 1000U M 6.3V                          |  |
| R8210                 | 401 256 1405                 | MT-GLAZE             | 330K JA 1/10W                 | C2325                 | 403 224 5705 | CERAMIC      | 1000P K 50V                           |  |
| R8211                 | 401 152 3206                 | MT-GLAZE             | 330 JA 1/10W                  | C2327                 | 401 150 6001 | MT-GLAZE     | 0.000 ZA 1/10W                        |  |
| R8212                 | 401 256 0101                 | MT-GLAZE             | 8.2K JA 1/10W                 | C2328                 | 404 084 3306 | ELECT        | 470U M 16V                            |  |
| R8213                 | 401 264 1909                 | MT-GLAZE             | 10K FA 1/10W                  | C2329                 | 403 279 0106 | CERAMIC      | 0.1U Z 25V                            |  |
| 110413                | 701 204 1303                 | MITGLALL             | TON IM TATOW                  |                       |              |              |                                       |  |

| Schematic      |                              |                  |                   |            | Calana                |                              |  |        |  |
|----------------|------------------------------|------------------|-------------------|------------|-----------------------|------------------------------|--|--------|--|
| Location       | Part No.                     | Description      |                   |            | Schematic<br>Location | Part No.                     | Description                            |        |  |
| C2330          | 404 084 2903                 | ELECT            | 1000U M           |            | C2545                 | 404 087 1200                 | ELECT 0.1U M                           | 50     |  |
| C2331          | 404 084 2705                 | ELECT            | 10U M             |            | C2613                 | 404 084 2804                 | ELECT 100U M                           |        |  |
| C2332          | 404 084 3801                 | ELECT            | 1U M              |            |                       |                              |  |        |  |
| C2333          | 403 056 7304                 | POLYESTER        |                   |            |                       | DIODES                       |  |        |  |
| 00004          | 403 178 9200                 | POLYESTER        |                   | 50V        | D2301                 | 407 092 9526                 | DIODE SB07-03C-TB                      |        |  |
| C2334          | 403 224 6108                 | CERAMIC          | 0.01U K           |            | D2302                 | 407 149 0807                 | DIODE 1SS355 TE-17                     |        |  |
| C2336<br>C2339 | 403 235 0409                 | CERAMIC          | 68P J             | 50V        | D2303                 | 407 149 0807                 | DIODE 1SS355 TE-17                     |        |  |
| C2339          | 404 084 3108<br>404 085 5002 | ELECT            | 330U M            | 16V        | D2320                 | 407 149 0807                 | DIODE 188355 TE-17                     |        |  |
| C2342          | 403 354 2803                 | ELECT<br>POLYPRO | 47U M             | 25V        | D2321                 | 407 149 0807                 | DIODE 1SS355 TE-17                     |        |  |
| C2343          | 404 084 5508                 | MT-POLYES        | 0.10 J            | 50V        | D2330<br>D2342        | 407 092 9526                 | DIODE SB07-03C-TB                      |        |  |
| 02040          | 403 237 8007                 | MT-COMPO         | T 0.1UJ<br>0.1U J | 63V        | D2342                 | 407 092 9526                 | DIODE SB07-03C-TB                      |        |  |
| C2344          | 404 084 5508                 | MT-POLYES        |                   | 50V<br>63V | D2543<br>D2501        | 407 149 0807<br>407 206 5608 | DIODE 1SS355 TE-17                     |        |  |
| 020-1-1        | 403 237 8007                 | MT-COMPO         | 0.103             | 50V        | D2502                 | 407 206 5608                 | ZENER DIODE UDZS108                    |        |  |
| C2345          | 403 279 0106                 | CERAMIC          | 0.10 J            | 25V        | D2502<br>D2503        | 407 206 5608                 | ZENER DIODE UDZS108                    |        |  |
| C2346          | 404 084 3306                 | ELECT            | 470U M            | 25V<br>16V | D2510                 | 407 149 0807                 | ZENER DIODE UDZS108                    | 3 IE-1 |  |
| C2372          | 404 084 3207                 | ELECT            | 4700 M            | 16V        | D2510<br>D2511        | 407 149 0807                 | DIODE 188355 TE-17                     |        |  |
| C2373          | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        | D2311                 | 401 145 0001                 | DIODE 1SS355 TE-17                     |        |  |
| ★ C2380        | 404 084 3801                 | ELECT            | 1U M              | 50V        |                       | INTEGRATE                    | CIRCUITS                               |        |  |
| C2500          | 404 091 6604                 | ELECT            | 4.7U M            | 25V        | IC2301                | 409 476 8600                 | IC NJM319M-TE2                         |        |  |
| C2501          | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V<br>25V | IC2303                | 409 124 5708                 | IC L78M09T-TL                          |        |  |
| C2502          | 404 084 2705                 | ELECT            | 10U M             | 16V        | IC2304                | 409 398 1901                 | IC L88MS05TL-TL                        |        |  |
| C2503          | 403 234 9007                 | CERAMIC          | 5P C              | 50V        | ★ IC2501              | 409 555 0709                 | IC CXA2180Q                            |        |  |
| C2503B         | 403 234 9007                 | CERAMIC          | 5P C              | 50V        | IC2502                | 409 528 6202                 | IC PQ050ES1MXP                         |        |  |
| C2503R         | 403 234 9007                 | CERAMIC          | 5P C              | 50V        |                       |                              |  |        |  |
| C2505          | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        |                       | COILS                        |  |        |  |
| C2506          | 404 084 2804                 | ELECT            | 100U M            | 16V        | L2301                 | 645 040 3101                 | INDUCTOR, 3.3U M                       |        |  |
| C2507          | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        | Δ.                    | 645 026 1008                 | INDUCTOR, 3.3U M                       |        |  |
| C2508          | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        | L2340                 | 645 008 2276                 | INDUCTOR, 22U K                        |        |  |
| C2509          | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        | L2341                 | 645 008 2009                 | INDUCTOR, 10U K                        |        |  |
| C2510          | 403 063 2309                 | POLYESTER        | 0.068U K          | 50V        | L2501                 | 645 008 2009                 | INDUCTOR, 10U K                        | •      |  |
|                | 403 179 0107                 | POLYESTER        |                   | 50V        | L2517                 | 645 008 2009                 | INDUCTOR, 10U K                        |        |  |
|                | 403 312 3002                 | POLYESTER        | 0.068U K          | 50V        | L2520                 | 645 008 2009                 | INDUCTOR, 10U K                        |        |  |
| C2511          | 403 224 5606                 | CERAMIC          | 2700P K           | 50V        |                       | TRANSISTOR                   | ne.                                    |        |  |
| C2512          | 403 235 0607                 | CERAMIC          | 100P J            | 50V        | <b>★</b> Q2320        | 405 014 4509                 |  |        |  |
| C2513          | 404 084 3207                 | ELECT            | 47U M             | 16V        | × Q2320               | 405 014 4509                 | TR 2SC2412K-T-96-R                     |        |  |
| C2515          | 404 084 2705                 | ELECT            | 10U M             | 16V        |                       | 405 015 8724                 | TR 2SC2412K-T-96-S<br>TR 2SC2812-L6-TB |        |  |
| C2521          | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        |                       | 405 015 8922                 | TR 2SC2812-L0-1B                       |        |  |
| C2522          | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        |                       | 405 163 1602                 | TR 2SC2812N-L6-TB                      |        |  |
| C2523          | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        |                       | 405 163 1701                 | TR 2SC2812N-L7-TB                      |        |  |
| C2524          | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        |                       | 405 173 9803                 | TR 2SC3928A1R                          |        |  |
| 02525          | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        |                       | 405 173 9902                 | TR 2SC3928A1S                          |        |  |
| C2526          | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        | Q2330                 | 405 014 4509                 | TR 2SC2412K-T-96-R                     |        |  |
| C2527          | 403 325 4706                 |                  | 0.047U K          | 25V        |                       | 405 014 4608                 | TR 2SC2412K-T-96-S                     |        |  |
| C2530          | 404 084 5706                 | MT-POLYEST       |                   | 63V        |                       | 405 015 8724                 | TR 2SC2812-L6-TB                       |        |  |
| COEO1          | 403 256 0808                 | MT-COMPO         | 0.47U J           | 50V        |                       | 405 015 8922                 | TR 2SC2812-L7-TB                       |        |  |
| C2531<br>C2532 | 404 084 4006                 | ELECT            | 2.2U M            | 50V        |                       | 405 163 1602                 | TR 2SC2812N-L6-TB                      |        |  |
| C2532          | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        |                       | 405 163 1701                 | TR 2SC2812N-L7-TB                      |        |  |
| C2534          | 404 092 9208                 |                  | 1000U M           | 6.3V       |                       | 405 173 9803                 | TR 2SC3928A1R                          |        |  |
| ULUU4          | 404 084 5508<br>403 237 8007 | MT-POLYEST       | 0.10J             | 63V        |                       | 405 173 9902                 | TR 2SC3928A1S                          |        |  |
| C2535          | 403 237 8007 404 084 5508    | MT-COMPO         | 0.1U J            | 50V        |                       | 405 014 4509                 | TR 2SC2412K-T-96-R                     |        |  |
| 0200J          | 403 237 8007                 | MT-POLYEST       | 0.1UJ             | 63V        |                       | 405 014 4608                 | TR 2SC2412K-T-96-S                     |        |  |
| C2536          | 404 084 5508                 | MT-COMPO         | 0.1U J            | 50V        |                       | 405 015 8724                 | TR 2SC2812-L6-TB                       |        |  |
| 02000          | 403 237 8007                 | MT-POLYEST       | 0.1UJ             | 63V        |                       | 405 015 8922                 | TR 2SC2812-L7-TB                       |        |  |
| C2537          | 403 279 0106                 | MT-COMPO         | 0.1U J            | 50V        |                       | 405 163 1602                 | TR 2SC2812N-L6-TB                      |        |  |
| C2538          | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        |                       | 405 163 1701                 | TR 2SC2812N-L7-TB                      |        |  |
| C2538          | 403 279 0106                 | CERAMIC          | 0.1U Z            | 25V        |                       | 405 173 9803                 | TR 2SC3928A1R                          |        |  |
| 02000          | 700 413 0100                 | CERAMIC          | 0.1U Z            | 25V        |                       |                              |  |        |  |
| C2543          | 404 087 1200                 | ELECT            | 0.1U M            | 50V        |                       | 405 173 9902                 | TR 2SC3928A1S                          |        |  |

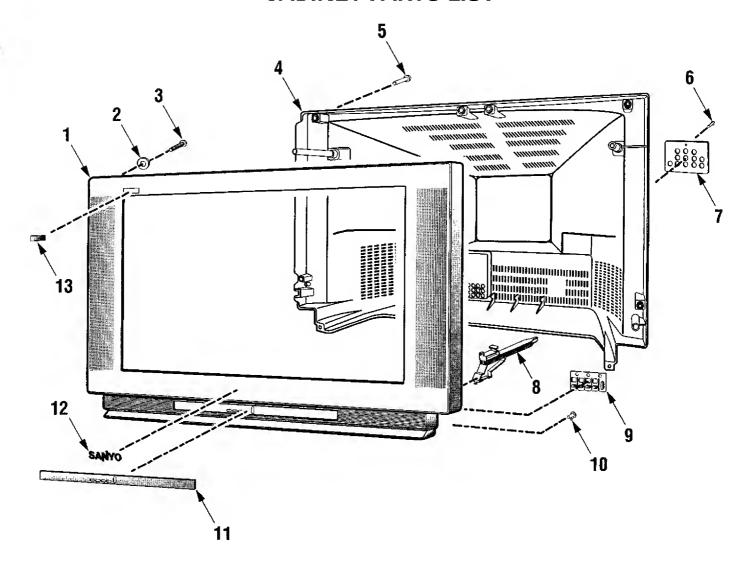
| Schematic<br>Location | Part No.     | Description         | Schematic<br>Location | Part No.     | Description             |
|-----------------------|--------------|---------------------|-----------------------|--------------|-------------------------|
| 02333                 | 405 134 5925 | TR 2SA1037AK T146 R | Q2506                 | 405 014 4509 | TR 2SC2412K-T-96-R      |
|                       | 405 147 2205 | TR 2SA1037AK T146 S |                       | 405 014 4608 | TR 2SC2412K-T-96-S      |
|                       | 405 002 0308 | TR 2SA1037K-T-96-R  |                       | 405 015 8724 | TR 2SC2812-L6-TB        |
|                       | 405 002 0407 | TR 2SA1037K-T-96-S  |                       | 405 015 8922 | TR 2SC2812-L7-TB        |
|                       | 405 002 6726 | TR 2SA1179-M6       |                       | 405 163 1602 | TR 2SC2812N-L6-TB       |
|                       | 405 002 6924 | TR 2SA1179-M7-TB    |                       | 405 163 1701 | TR 2SC2812N-L7-TB       |
|                       | 405 163 1503 | TR 2SA1179N-M6-TB   |                       | 405 173 9803 | TR 2SC3928A1R           |
|                       | 405 163 2708 | TR 2SA1179N-M7-TB   |                       | 405 173 9902 | TR 2SC3928A1S           |
|                       | 405 173 9605 | TR 2SA1235A1E       | Q2513                 | 405 134 5925 | TR 2SA1037AK T146 R     |
|                       | 405 173 9704 | TR 2SA1235A1F       |                       | 405 147 2205 | TR 2SA1037AK T146 S     |
| 02501                 | 405 134 5925 | TR 2SA1037AK T146 R |                       | 405 002 0308 | TR 2SA1037K-T-96-R      |
|                       | 405 147 2205 | TR 2SA1037AK T146 S |                       | 405 002 0407 | TR 2SA1037K-T-96-S      |
|                       | 405 002 0308 | TR 2SA1037K-T-96-R  |                       | 405 002 6726 | TR 2SA1179-M6           |
|                       | 405 002 0407 | TR 2SA1037K-T-96-S  |                       | 405 002 6924 | TR 2SA1179-M7-TB        |
|                       | 405 002 6726 | TR 2SA1179-M6       |                       | 405 163 1503 | TR 2SA1179N-M6-TB       |
|                       | 405 002 6924 | TR 2SA1179-M7-TB    |                       | 405 163 2708 | TR 2SA1179N-M7-TB       |
|                       | 405 163 1503 | TR 2SA1179N-M6-TB   |                       | 405 173 9605 | TR 2SA1235A1E           |
|                       | 405 163 2708 | TR 2SA1179N-M7-TB   |                       | 405 173 9704 | TR 2SA1235A1F           |
|                       | 405 173 9605 | TR 2SA1235A1E       |                       |              |                         |
|                       | 405 173 9704 | TR 2SA1235A1F       |                       | RESISTORS    |                         |
| 02502                 | 405 134 5925 | TR 2SA1037AK T146 R | R2301                 | 401 255 6500 | MT-GLAZE 100 JA 1/10W   |
|                       | 405 147 2205 | TR 2SA1037AK T146 S | R2302                 | 401 256 0101 | MT-GLAZE 8.2K JA 1/10W  |
|                       | 405 002 0308 | TR 2SA1037K-T-96-R  | R2303                 | 401 150 6209 | MT-GLAZE 1K JA 1/10W    |
|                       | 405 002 0407 | TR 2SA1037K-T-96-S  | R2304                 | 401 150 6209 | MT-GLAZE 1K JA 1/10W    |
|                       | 405 002 6726 | TR 2SA1179-M6       | R2305                 | 401 256 0101 | MT-GLAZE 8.2K JA 1/10W  |
|                       | 405 002 6924 | TR 2SA1179-M7-TB    | R2306                 | 401 256 0101 | MT-GLAZE 8.2K JA 1/10W  |
|                       | 405 163 1503 | TR 2SA1179N-M6-TB   | R2309                 | 401 291 7608 | MT-GLAZE 10 FA 1/2W     |
|                       | 405 163 2708 | TR 2SA1179N-M7-TB   | R2310                 | 401 255 6500 | MT-GLAZE 100 JA 1/10W   |
|                       | 405 173 9605 | TR 2SA1235A1E       | R2312                 | 401 255 6500 | MT-GLAZE 100 JA 1/10W   |
|                       | 405 173 9704 | TR 2SA1235A1F       | R2313                 | 401 255 6500 | MT-GLAZE 100 JA 1/10W   |
| Q2503                 | 405 134 5925 | TR 2SA1037AK T146 R | R2314                 | 401 255 6500 | MT-GLAZE 100 JA 1/10W   |
|                       | 405 147 2205 | TR 2SA1037AK T146 S | R2315                 | 401 255 6500 | MT-GLAZE 100 JA 1/10W   |
|                       | 405 002 0308 | TR 2SA1037K-T-96-R  | R2317                 | 401 264 1909 | MT-GLAZE 10K FA 1/10W   |
|                       | 405 002 0407 | TR 2SA1037K-T-96-S  | R2318                 | 401 256 6004 | MT-GLAZE 27K JA 1/10W   |
|                       | 405 002 6726 | TR 2SA1179-M6       | R2319                 | 401 256 0101 | MT-GLAZE 8.2K JA 1/10W  |
|                       | 405 002 6924 | TR 2SA1179-M7-TB    | R2320                 | 401 162 3609 | MT-GLAZE 470 JA 1/10W   |
|                       | 405 163 1503 | TR 2SA1179N-M6-TB   | R2321                 | 401 255 6500 | MT-GLAZE 100 JA 1/10W   |
|                       | 405 163 2708 | TR 2SA1179N-M7-TB   | R2322                 | 401 150 6001 | MT-GLAZE 0.000 ZA 1/10W |
|                       | 405 173 9605 | TR 2SA1235A1E       | R2323                 | 403 343 4603 | CERAMIC 0.022U K 50V    |
|                       | 405 173 9704 | TR 2SA1235A1F       | R2324                 | 401 256 5809 | MT-GLAZE 270K JA 1/10W  |
| Q2504                 | 405 134 5925 | TR 2SA1037AK T146 R | R2325                 | 401 150 5905 | MT-GLAZE 10K JA 1/10W   |
|                       | 405 147 2205 | TR 2SA1037AK T146 S | R2326                 | 401 256 1702 | MT-GLAZE 33K JA 1/10W   |
|                       | 405 002 0308 | TR 2SA1037K-T-96-R  | R2327                 | 401 150 5806 | MT-GLAZE 100K JA 1/10W  |
|                       | 405 002 0407 | TR 2SA1037K-T-96-S  | R2328                 | 401 162 3708 | MT-GLAZE 4.7K JA 1/10W  |
|                       | 405 002 6726 | TR 2SA1179-M6       | R2329                 | 401 256 7209 | MT-GLAZE 18K JA 1/10W   |
|                       | 405 002 6924 | TR 2SA1179-M7-TB    | R2330                 | 401 256 7308 | MT-GLAZE 6.8K JA 1/10W  |
|                       | 405 163 1503 | TR 2SA1179N-M6-TB   | R2331                 | 401 256 6608 | MT-GLAZE 68K JA 1/10W   |
|                       | 405 163 2708 | TR 2SA1179N-M7-TB   | R2332                 | 401 162 3005 | MT-GLAZE 22K JA 1/10W   |
|                       | 405 173 9605 | TR 2SA1235A1E       | R2333                 | 401 256 5908 | MT-GLAZE 2.7K JA 1/10W  |
|                       | 405 173 9704 | TR 2SA1235A1F       | R2334                 | 401 162 4101 | MT-GLAZE 5.6K JA 1/10W  |
| Q2505                 | 405 134 5925 | TR 2SA1037AK T146 R | R2335                 | 401 256 3607 | MT-GLAZE 15K JA 1/10W   |
|                       | 405 147 2205 | TR 2SA1037AK T146 S | R2336                 | 401 162 4101 | MT-GLAZE 5.6K JA 1/10W  |
|                       | 405 002 0308 | TR 2SA1037K-T-96-R  | R2337                 | 401 162 3708 | MT-GLAZE 4.7K JA 1/10W  |
|                       | 405 002 0407 | TR 2SA1037K-T-96-S  | R2338                 | 401 255 6500 | MT-GLAZE 100 JA 1/10W   |
|                       | 405 002 6726 | TR 2SA1179-M6       | R2341                 | 401 150 6001 | MT-GLAZE 0.000 ZA 1/10W |
|                       | 405 002 6924 | TR 2SA1179-M7-TB    | R2343                 | 401 150 6001 | MT-GLAZE 0.000 ZA 1/10W |
|                       | 405 163 1503 | TR 2SA1179N-M6-TB   | R2344                 | 401 150 6001 | MT-GLAZE 0.000 ZA 1/10W |
|                       | 405 163 2708 | TR 2SA1179N-M7-TB   | R2345                 | 401 150 6001 | MT-GLAZE 0.000 ZA 1/10W |
|                       | 405 173 9605 | TR 2SA1235A1E       | R2346                 | 401 150 6001 | MT-GLAZE 0.000 ZA 1/10W |
|                       | 405 173 9704 | TR 2SA1235A1F       | R2347                 | 401 255 6500 | MT-GLAZE 100 JA 1/10W   |

| Schematic<br>Location | Part No.                     | De                   | scription                        | Schematic<br>Location | Part No.                     | Description                        |
|-----------------------|------------------------------|----------------------|----------------------------------|-----------------------|------------------------------|------------------------------------|
| R2348                 | 401 255 6500                 | MT-GLAZE             | 100 JA 1/10W                     |                       | MISCELLANI                   | EOUS                               |
| R2349                 | 401 256 5908                 | MT-GLAZE             | 2.7K JA 1/10W                    | A4351                 | 610 310 1798                 | ASSY, PWB, VIDEO-H3ABM             |
| R2350                 | 401 255 6500                 | MT-GLAZE             | 100 JA 1/10W                     | X2301                 | 645 047 2794                 | OSC, CERAMIC 2.696MHZ              |
| R2352                 | 401 255 6500                 | MT-GLAZE             | 100 JA 1/10W                     |                       |                              |                                    |
| R2353                 | 401 256 6905                 | MT-GLAZE             | 680 JA 1/10W                     |                       | 0DT 0001/                    | ET DO DOADD                        |
| R2354                 | 401 162 3104                 | MT-GLAZE             | 3.3K JA 1/10W                    |                       | CRI SOCK                     | ET PC BOARD                        |
| R2355                 | 401 256 7704                 | MT-GLAZE             | 3.9M JA 1/10W                    |                       | CAPACITORS                   |                                    |
| R2356                 | 401 256 7803                 | MT-GLAZE             | 390K JA 1/10W                    | 0740                  |                              | CERAMIC 0.01U Z 50V                |
| R2357                 | 401 255 6500                 | MT-GLAZE             | 100 JA 1/10W                     | C710                  | 403 069 8305<br>403 161 9200 | MT-POLYEST 0.22U K 250V            |
| R2358                 | 401 255 6500                 | MT-GLAZE             | 100 JA 1/10W                     | C711                  | 403 161 9200                 | MT-POLYEST 0.22U K 250V            |
| R2360                 | 401 162 3708                 | MT-GLAZE             | 4.7K JA 1/10W                    | C721<br>C731          | 403 161 9200                 | MT-POLYEST 0.22U K 250V            |
| R2361                 | 401 150 6100                 | MT-GLAZE             | 2.2K JA 1/10W                    | C733                  | 403 057 3107                 | POLYESTER 0.1U K 50V               |
| R2362                 | 401 150 6100                 | MT-GLAZE             | 2.2K JA 1/10W                    | 0/33                  | 403 181 8207                 | POLYESTER 0.10 K 50V               |
| R2363                 | 401 255 5800                 | MT-GLAZE             | 2K JA 1/10W                      | ★ C742                | 403 245 5609                 | ELECT 10U M 250V                   |
| R2364                 | 401 255 5800                 | MT-GLAZE             | 2K JA 1/10W                      | ★ C744                | 403 077 2807                 | CERAMIC 1000P Z 2K                 |
| R2365                 | 401 162 2909                 | MT-GLAZE             | 220 JA 1/10W                     | C754                  | 404 087 0500                 | ELECT 220U M 10V                   |
| R2367                 | 401 256 5304                 | MT-GLAZE             | 56K JA 1/10W                     | 0734                  | 404 007 0300                 | 2233 11.                           |
| R2368                 | 401 150 6100                 | MT-GLAZE             | 2.2K JA 1/10W                    |                       | DIODES                       |                                    |
| R2369                 | 401 150 6100                 | MT-GLAZE             | 2.2K JA 1/10W                    | D711                  | 407 006 3903                 | DIODE ERB43-04                     |
| R2371                 | 401 150 5905                 | MT-GLAZE             | 10K JA 1/10W                     |                       | 407 011 4407                 | DIODE TVR1G                        |
| ★ R2380               | 401 150 5905                 | MT-GLAZE             | 10K JA 1/10W                     | D712                  | 407 006 3903                 | DIODE ERB43-04                     |
| R2382                 | 401 150 6001                 | MT-GLAZE             | 0.000 ZA 1/10W                   |                       | 407 011 4407                 | DIODE TVR1G                        |
| R2503                 | 401 152 3206                 | MT-GLAZE             | 330 JA 1/10W<br>470FA 1/4W       | D721                  | 407 006 3903                 | DIODE ERB43-04                     |
| R2506                 | 401 306 3809                 | MT-GLAZE<br>MT-GLAZE | 330 JA 1/10W                     |                       | 407 011 4407                 | DIODE TVR1G                        |
| R2507                 | 401 152 3206                 | MT-GLAZE             | 330 JA 1/10W                     | D722                  | 407 006 3903                 | DIODE ERB43-04                     |
| R2508<br>R2510        | 401 152 3206<br>401 306 3809 | MT-GLAZE             | 470FA 1/4W                       |                       | 407 011 4407                 | DIODE TVR1G                        |
| R2511                 | 401 306 3809                 | MT-GLAZE             | 470FA 1/4W                       | D731                  | 407 006 3903                 | DIODE ERB43-04                     |
| R2512                 | 401 150 6209                 | MT-GLAZE             | 1K JA 1/10W                      |                       | 407 011 4407                 | DIODE TVR1G                        |
| R2512                 | 401 255 6500                 | MT-GLAZE             | 100 JA 1/10W                     | D732                  | 407 006 3903                 | DIODE ERB43-04                     |
| R2514                 | 401 256 1702                 | MT-GLAZE             | 33K JA 1/10W                     |                       | 407 011 4407                 | DIODE TVR1G                        |
| R2516                 | 401 150 6209                 | MT-GLAZE             | 1K JA 1/10W                      | D742                  | 407 124 6404                 | DIODE ERA18-04                     |
| R2517                 | 401 150 6001                 | MT-GLAZE             | 0.000 ZA 1/10W                   |                       | 407 007 6606                 | DIODE ES1                          |
| R2520                 | 401 255 6500                 | MT-GLAZE             | 100 JA 1/10W                     | D764                  | 407 124 5506                 | DIODE RMPG06G<br>DIODE 1N4148      |
| R2522                 | 401 256 1900                 | MT-GLAZE             | 3.3M JA 1/10W                    | D754                  | 408 008 2406                 | DIODE 182076A                      |
| R2523                 | 401 255 6500                 | MT-GLAZE             | 100 JA 1/10W                     |                       | 407 013 4306<br>407 013 7109 | DIODE 182473                       |
| R2525                 | 401 255 6500                 | MT-GLAZE             | 100 JA 1/10W                     | D755                  | 407 065 1308                 | ZENER DIODE MTZJ3.68               |
| R2527                 | 401 265 1700                 | MT-GLAZE             | 4.7K FA 1/10W                    | D755<br>D761          | 407 099 6607                 | ZENER DIODE MTZJ12B                |
| R2538                 | 401 150 5905                 | MT-GLAZE             | 10K JA 1/10W                     | וטוט                  | 407 054 3207                 | ZENER DIODE RD12EB2                |
| R2543                 | 401 150 6209                 | MT-GLAZE             | 1K JA 1/10W                      | D762                  | 407 099 6607                 | ZENER DIODE MTZJ12B                |
| R2544                 | 401 150 6209                 | MT-GLAZE             | 1K JA 1/10W                      | D102                  | 407 054 3207                 | ZENER DIODE RD12EB2                |
| R2545                 | 401 150 6209                 | MT-GLAZE             | 1K JA 1/10W                      | D763                  | 407 099 6607                 | ZENER DIODE MTZJ12B                |
| R2546                 | 401 162 2909                 | MT-GLAZE             | 220 JA 1/10W                     | 5,00                  | 407 054 3207                 | ZENER DIODE RD12EB2                |
| R2547                 | 401 150 6209                 | MT-GLAZE             | 1K JA 1/10W                      |                       | ,0. 55.525                   |                                    |
| R2548                 | 401 256 4109                 | MT-GLAZE             | 56 JA 1/10W                      |                       | INTEGRATE                    |                                    |
| R2560                 | 401 256 4109                 | MT-GLAZE             | 56 JA 1/10W                      | IC711                 | 409 542 4406                 | IC TDA6118JF/N1                    |
| R2561                 | 401 256 4109                 | MT-GLAZE             | 56 JA 1/10W                      | IC721                 | 409 542 4406                 | IC TDA6118JF/N1                    |
| R2562                 | 401 256 4109                 | MT-GLAZE             | 56 JA 1/10W                      | IC731                 | 409 542 4406                 | IC TDA6118JF/N1                    |
| R2616                 | 401 150 6001                 | MT-GLAZE<br>MT-GLAZE | 0.000 ZA 1/10W<br>0.000 ZA 1/10W |                       | 0011.0                       |                                    |
| R2617                 | 401 150 6001                 | MT-GLAZE             | 0.000 ZA 1/10W                   | 1740                  | COILS                        | CADRON 99 IA 1/6W                  |
| R2624                 | 401 150 6001                 | MT-GLAZE             | 0.000 ZA 1/10W                   | L710                  | 401 025 7102                 | CARBON 22 JA 1/6W                  |
| R2626<br>R2962        | 401 150 6001<br>401 255 6500 | MT-GLAZE             | 100 JA 1/10W                     | L711                  | 645 008 0777                 | INDUCTOR, 12U K<br>INDUCTOR, 12U K |
| R2962<br>R2963        | 401 255 6500                 | MT-GLAZE             | 100 JA 1/10W                     | L721                  | 645 008 0777                 | INDUCTOR, 120 K                    |
| R2964                 | 401 255 6500                 | MT-GLAZE             | 100 JA 1/10W                     | L731                  | 645 008 0777<br>645 001 4871 | INDUCTOR, 120 K<br>INDUCTOR, 100 K |
| R2968                 | 401 162 2909                 | MT-GLAZE             | 220 JA 1/10W                     | L741                  | 040 001 407 1                | MDOGION, 100 N                     |
| R2969                 | 401 162 2909                 | MT-GLAZE             | 220 JA 1/10W                     |                       |                              |                                    |
| R2985                 | 401 150 5806                 | MT-GLAZE             | 100K JA 1/10W                    |                       |                              |                                    |
| R2986                 | 401 150 5806                 | MT-GLAZE             | 100K JA 1/10W                    |                       |                              |                                    |
| 112300                | 701 100 0000                 | III GLIML            | 1001.011 111011                  |                       |                              |                                    |

| Schematic<br>Location | Part No.                     | Description                      | Schematic<br>Location | Part No.                              | Des              | cription             |
|-----------------------|------------------------------|----------------------------------|-----------------------|---------------------------------------|------------------|----------------------|
|                       | TRANSISTOR                   | S                                |                       | RESISTORS                             | CARRON           | 100 JA 1/4W          |
| 0744                  | 405 011 8401                 | TR 2SC1740S-Q                    | R701                  | 401 012 4503                          | CARBON           | 100 JA 1/4W          |
| Q711                  | 405 011 8500                 | TR 2SC1740S-R                    | R702                  | 401 012 4503                          | CARBON           | 100 JA 1/4W          |
|                       | 405 011 8609                 | TR 2SC1740S-S                    | R703                  | 401 012 4503                          | CARBON           | 100 JA 1/6W          |
|                       | 405 012 2002                 | TR 2SC1815-GR                    | R711                  | 401 024 6700                          | CARBON           | 470 JA 1/4V          |
|                       | 405 012 2101                 | TR 2SC1815-0                     | R712                  | 401 020 0801                          | CARBON           | 56 JA 1/6V           |
|                       | 405 012 2309                 | TR 2SC1815-Y                     | R713                  | 401 027 2105                          | CARBON<br>CARBON | 56 JA 1/6V           |
|                       | 405 157 0505                 | TR 2SC536NF-NPA                  | R714                  | 401 027 2105                          | CARBON           | 100 JA 1/4V          |
|                       | 405 151 8705                 | TR 2SC536NG-NPA                  | R716                  | 401 012 4503                          | CARBON           | 220 JA 1/2V          |
|                       | 405 020 7501                 | TR 2SC945A-PA                    | R717                  | 401 008 6702                          | CARBON           | 180K JA 1/6V         |
|                       | 405 020 7709                 | TR 2SC945A-QA                    | R719                  | 401 025 49 <b>0</b> 3<br>401 024 6700 | CARBON           | 100 JA 1/6\          |
|                       | 405 020 7907                 | TR 2SC945A-RA                    | R721                  | 401 020 0801                          | CARBON           | 470 JA 1/4\          |
| Q721                  | 405 011 8401                 | TR 2SC1740S-Q                    | R722                  | 401 020 0001                          | CARBON           | 56 JA 1/6\           |
| W. E.                 | 405 011 8500                 | TR 2SC1740S-R                    | R723                  | 401 027 2105                          | CARBON           | 56 JA 1/6\           |
|                       | 405 011 8609                 | TR 2SC1740S-S                    | R724                  | 401 027 2103                          | CARBON           | 100 JA 1/4\          |
|                       | 405 012 2002                 | TR 2SC1815-GR                    | R725                  | 401 008 6702                          | CARBON           | 220 JA 1/2\          |
|                       | 405 012 2101                 | TR 2SC1815-0                     | R726                  | 401 008 0702                          | CARBON           | 1K JA 1/4\           |
|                       | 405 012 2309                 | TR 2SC1815-Y                     | R727                  | 401 025 4606                          | CARBON           | 18K JA 1/6           |
|                       | 405 157 0505                 | TR 2SC536NF-NPA                  | R729                  | 401 023 4000                          | CARBON           | 100 JA 1/6           |
|                       | 405 151 8705                 | TR 2SC536NG-NPA                  | R731                  | 401 020 0801                          | CARBON           | 470 JA 1/4           |
|                       | 405 020 7501                 | TR 2SC945A-PA                    | R732                  | 401 027 2105                          | CARBON           | 56 JA 1/6            |
|                       | 405 020 7709                 | TR 2SC945A-QA                    | R733                  | 401 027 2105                          | CARBON           | 56 JA 1/6            |
|                       | 405 020 7907                 | TR 2SC945A-RA                    | R734<br>R735          | 401 012 4503                          | CARBON           | 100 JA 1/4           |
| Q731                  | 405 011 8401                 | TR 2SC1740S-Q                    | R736                  | 401 008 6702                          | CARBON           | 220 JA 1/2           |
|                       | 405 011 8500                 | TR 2SC1740S-R                    | R737                  | 401 012 5708                          | CARBON           | 1K JA 1/4            |
|                       | 405 011 8609                 | TR 2SC1740S-S                    | R739                  | 401 012 5708                          | CARBON           | 1K JA 1/4            |
|                       | 405 012 2002                 | TR 2SC1815-GR                    | + R741                | 401 068 6209                          | OXIDE-MT         | 5.6 JA 2             |
|                       | 405 012 2101                 | TR 2SC1815-0                     | R742                  | 401 024 7707                          | CARBON           | 10 <b>0</b> K JA 1/6 |
|                       | 405 012 2309                 | TR 2SC1815-Y                     | R743                  | 401 025 1902                          | CARBON           | 15K JA 1/6           |
|                       | 405 157 0505                 | TR 2SC536NF-NPA                  | R744                  | 401 024 7707                          | CARBON           | 100K JA 1/6          |
|                       | 405 151 8705                 | TR 2SC536NG-NPA<br>TR 2SC945A-PA | ★ R745                | 401 068 5509                          | OXIDE-MT         | 47K JA 2             |
|                       | 405 020 7501                 | TR 250945A-PA<br>TR 250945A-QA   | ★ R746                | 401 067 4206                          | OXIDE-MT         | 33 JA 2              |
|                       | 405 020 7709                 | TR 2SC945A-RA                    | R747                  | 401 027 2600                          | CARBON           | 5.6K JA 1/6          |
| -0                    | 405 020 7907                 | TR 2SC1740S-Q                    | R756                  | 401 024 7004                          | CARBON           | 1K JA 1/6            |
| Q741                  | 405 011 8401                 | TR 2SC1740S-R                    | R757                  | 401 026 6609                          | CARBON           | 390 JA 1/6           |
|                       | 405 011 8500                 | TR 2SC1740S-S                    | R758                  | 401 024 7400                          | CARBON           | 10K JA 1/6           |
|                       | 405 011 8609                 | TR 2SC1815-GR                    | R759                  | 401 024 6403                          | CARBON           | 10 JA 1/6            |
|                       | 405 012 2002                 | TR 2SC1815-0                     |                       |                                       | JEOUIC           |                      |
|                       | 405 012 2101<br>405 012 2309 | TR 2SC1815-Y                     |                       | MISCELLA                              | AEOO2            | 3, SOCKET-H3GL       |
|                       | 405 012 2309                 | TR 2SC536NF-NPA                  | A701                  | 610 311 9236                          | SOCKET, C        |                      |
|                       | 405 151 8705                 | TR 2SC536NG-NPA                  | ★ K702                | 645 028 0306                          | SOCKET, C        |                      |
|                       | 405 020 7501                 | TR 2SC945A-PA                    | =                     | 652 001 1472                          | FILTER, EN       |                      |
|                       | 405 020 7709                 | TR 2SC945A-QA                    | XL710                 | 610 216 4268                          |                  |                      |
|                       | 405 020 7703                 | TR 2SC945A-RA                    | XL720                 | 610 216 4268                          | FILTER, EN       | AL 120PF             |
| 0740                  | 405 029 7106                 | TR 2SC2271-D                     | XL730                 | 610 216 4268                          | HLICH, CH        | m 1201 t             |
| Q742                  | 405 013 6207                 | TR 2SC2271-D-CTV                 |                       |                                       |                  |                      |
|                       | 405 029 7205                 | TR 2SC2271-E                     |                       |                                       |                  |                      |
|                       | 405 013 6306                 | TR 2SC2271-E-CTV                 |                       |                                       |                  |                      |
| Q743                  | 405 101 5600                 | TR 2SA1786E-AN                   |                       |                                       |                  |                      |
| Q753                  | 406 000 6804                 | TR 2SA1015-GR(SAN)               |                       |                                       |                  |                      |
| Q150                  | 405 001 7407                 | TR 2SA1015-0(SAN)                |                       |                                       |                  |                      |
|                       | 405 001 7605                 | TR 2SA1015-Y(SAN)                |                       |                                       |                  |                      |
|                       | 405 004 3109                 | TR 2SA564A-Q(CU)                 |                       |                                       |                  |                      |
|                       | 405 004 3208                 | TR 2SA564A-R(CU)                 |                       |                                       |                  |                      |
|                       | 405 151 3304                 | TR 2SA608NF-NPA                  |                       |                                       |                  |                      |
|                       | 405 006 1707                 | TR 2SA933S-Q                     |                       |                                       |                  |                      |
|                       | 405 006 1806                 | TR 2SA933S-R                     |                       |                                       |                  |                      |

| Schema         |                              | Description                       |              | Schematic        | Part No.                     | T                     |                   |              |
|----------------|------------------------------|-----------------------------------|--------------|------------------|------------------------------|-----------------------|-------------------|--------------|
| Location       |                              |                                   |              | Location         | Part NO.                     | Des                   | scription         |              |
| VE             | LOCITY MOL                   | DULATION PC BOAI                  | RD           |                  | 405 157 0505                 | TR 2SC536N            |                   |              |
|                | CAPACITO                     | pe                                |              |                  | 405 151 8705                 | TR 2SC536N            |                   |              |
| C1705          | 404 092 1905                 |                                   | E0)1         |                  | 405 020 7501                 | TR 2SC945A            |                   |              |
| C1711          | 403 057 3107                 |                                   | 50V          |                  | 405 020 7709                 | TR 2SC945A            |                   |              |
| 01111          | 403 181 8207                 | POLYESTER 0.1U K POLYESTER 0.1U K | 50V          |                  | 405 020 7907                 | TR 2SC945A-           | -RA               |              |
| C1712          | 403 062 0504                 | POLYESTER 0.047U K                | 50V<br>50V   |                  | RESISTORS                    |                       |                   |              |
| 02             | 403 179 0909                 | POLYESTER 0.0470 K                | 50V<br>50V   | R1701            | 401 024 6700                 | CARRON                | 100.14            | 410          |
| C1713          | 403 071 5606                 | CERAMIC 220P K                    | 50V<br>50V   | R1707            | 401 027 5205                 | CARBON<br>CARBON      |                   |              |
| C1715          | 403 159 7409                 |                                   | 250V         | R1708            | 401 015 7808                 | CARBON                | 680 JA<br>2.7 JA  |              |
| C1717          | 404 084 5508                 | MT-POLYEST 0.1UJ                  | 63V          | R1709            | 401 015 7808                 | CARBON                | 2.7 JA<br>2.7 JA  | 1/4'<br>1/4' |
|                | 403 237 8007                 | MT-COMPO 0.1U J                   | 50V          | R1711            | 401 027 2105                 | CARBON                | 56 JA             | 1/6'         |
| C1718          | 404 084 2507                 | ELECT 47U M                       | 10V          | R1716            | 401 026 3905                 | CARBON                | 330 JA            | 1/6          |
| C1719          | 403 259 9006                 |                                   | 160V         | R1720            | 401 024 9701                 | CARBON                | 12K JA            | 1/61         |
| C1721          | 404 084 3801                 | ELECT 1U M                        | 50V          | R1722            | 401 026 4605                 | CARBON                | 33K JA            | 1/61         |
| C1722          | 403 222 0603                 | ELECT 22U M                       | 160V         | R1723            | 401 027 2600                 | CARBON                | 5.6K JA           | 1/61         |
| C1723          | 403 075 8009                 | CERAMIC 0.01U K                   | 500V         | R1724            | 401 027 5908                 | CARBON                | 68K JA            | 1/61         |
| C1724          | 403 071 5606                 | CERAMIC 220P K                    | 50V          | R1727            | 401 006 9408                 | CARBON                | 10 JB             | 1/2\         |
| C1748          | 403 069 8305                 | CERAMIC 0.01U Z                   | 5 <b>0</b> V | R1728            | 401 025 3807                 | CARBON                | 180 JA            | 1/6\         |
| C1749          | 404 084 4303                 | ELECT 47U M                       | 50V          | ★ R1730          | 401 067 5302                 | OXIDE-MT              | 330 JA            | 21           |
| C1750          | 403 069 8305                 | CERAMIC 0.01U Z                   | 50V          | R1732            | 401 024 9305                 | CARBON                | 1.2K JA           | 1/6\         |
| C1751          | 404 084 3900                 | ELECT 10U M                       | 50V          | R1733            | 401 024 7707                 | CARBON                | 100K JA           | 1/61         |
|                | DIODES                       |                                   |              | R1734            | 401 024 7707                 | CARBON                | 100K JA           | 1/6\         |
| D1705          | 407 108 5300                 | DIODE SB07-03N                    |              | R1735            | 401 024 9305                 | CARBON                |                   | 1/6V         |
| D1707          | 407 108 5300                 | DIODE SB07-03N                    |              | R1736<br>★ R1737 | 401 024 9701                 | CARBON                | 12K JA            | 1/61         |
| D1708          | 407 012 4406                 | DIODE 188133                      |              | ★ R1738          | 401 065 1801                 | OXIDE-MT              | 12 JA             | 2٧           |
| D1750          | 407 012 4406                 | DIODE 188133                      |              | ★ R1742          | 401 065 1801<br>401 066 6102 | OXIDE-MT              | 12 JA             | 2            |
| D1751          | 407 012 4406                 | DIODE 1SS133                      |              | ★ R1743          | 402 063 6706                 | OXIDE-MT              | 220 JA            | 27           |
| D1752          | 407 012 4406                 | DIODE 1SS133                      |              | R1744            | 401 024 9305                 | FUSIBLE RES<br>Carbon | 270 J-<br>1.2K JA | 2V<br>1/6V   |
|                | 0011.0                       |                                   |              |                  | 101 021 0000                 | OANDON                | I.ZR JA           | 1/01         |
| ★ L1708        | COILS<br>402 001 6300        | FUSIBLE RES 10 J- 1/4W            |              |                  | MISCELLANE                   |                       |                   |              |
|                |                              | 1 051DEE 1125 10 0- 1/444         |              | A1701            | 610 314 6133                 | ASSY, PWB, VI         | M-H3GLM           |              |
|                | TRANSISTORS                  |                                   |              |                  |                              |                       |                   |              |
| Q1702          | 405 011 8401                 | TR 2SC1740S-Q                     |              |                  | <b>DIGITAL PC</b>            | BOARD                 |                   |              |
|                | 405 011 8500                 | TR 2SC1740S-R                     |              | A900             | 645 065 0079                 | UNIT, US DIGIT        | ΓAL               |              |
|                | 405 011 8609                 | TR 2SC1740S-S                     |              | Nonservicable    | part. No discreet p          | oarts provided fo     | r this pc b       | oard.        |
|                | 405 012 2002<br>405 012 2101 | TR 2SC1815-GR                     |              |                  |                              |                       |                   |              |
|                | 405 012 2309                 | TR 2SC1815-0<br>TR 2SC1815-Y      |              |                  | RAICCELLAR                   | IFOLIC                |                   |              |
|                | 405 157 0505                 | TR 2SC536NF-NPA                   |              |                  | MISCELLAN                    |                       |                   | _            |
|                | 405 151 8705                 | TR 2SC536NG-NPA                   |              |                  | 645 064 9240<br>414 012 7108 | ASSY, COIL, DE        |                   | G            |
|                | 405 020 7501                 | TR 2SC945A-PA                     |              |                  | 414 012 7106                 | CRT W76QEN6           |                   |              |
|                | 405 020 7709                 | TR 2SC945A-QA                     |              |                  | 652 001 1311                 | SPEAKER, 8-5V         |                   |              |
|                | 405 020 7907                 | TR 2SC945A-RA                     |              |                  | 652 001 1311                 | SPEAKER, 8-5V         |                   |              |
| Q1706          | 405 086 8702                 | TR 2SC4159                        |              |                  | 610 312 7743                 | ASSY, WIRE GN         |                   | CTOE         |
|                | 405 086 8801                 | TR 2SC4159                        |              |                  | 610 311 6440                 | VM BOARD HO           |                   | 0101         |
| Q1707          | 405 086 8702                 | TR 2SC4159                        |              |                  |                              |                       |                   |              |
|                | 405 086 8801                 | TR 2SC4159                        |              |                  |                              |                       |                   |              |
| Q1708          | 405 100 1603                 | TR 2SA1606-D-RA                   |              |                  |                              |                       |                   |              |
| 04700          | 405 100 1702                 | TR 2SA1606-E-RA                   |              |                  |                              |                       |                   | !            |
| Q1709          | 405 108 4903                 | TR 2SA1837-LB                     |              |                  |                              |                       |                   | ,            |
| Q1711<br>Q1712 | 405 108 5009                 | TR 2SC4793-LB                     |              |                  |                              |                       |                   |              |
| WI/IZ          | 405 011 8401<br>405 011 8500 | TR 2SC1740S-Q                     |              |                  |                              |                       |                   | ->           |
|                | 405 011 8500                 | TR 2SC1740S-R                     |              |                  |                              |                       |                   |              |
|                | 405 011 8809                 | TR 2SC1740S-S<br>TR 2SC1815-GR    |              |                  |                              |                       |                   | : :          |
|                | 405 012 2101                 | TR 2801815-GR<br>TR 2801815-0     |              |                  |                              |                       |                   |              |
|                | 405 012 2309                 | TR 2SC1815-Y                      |              |                  |                              |                       |                   |              |
|                |                              | 2001010 1                         |              |                  |                              |                       |                   |              |

## **CABINET PARTS LIST**



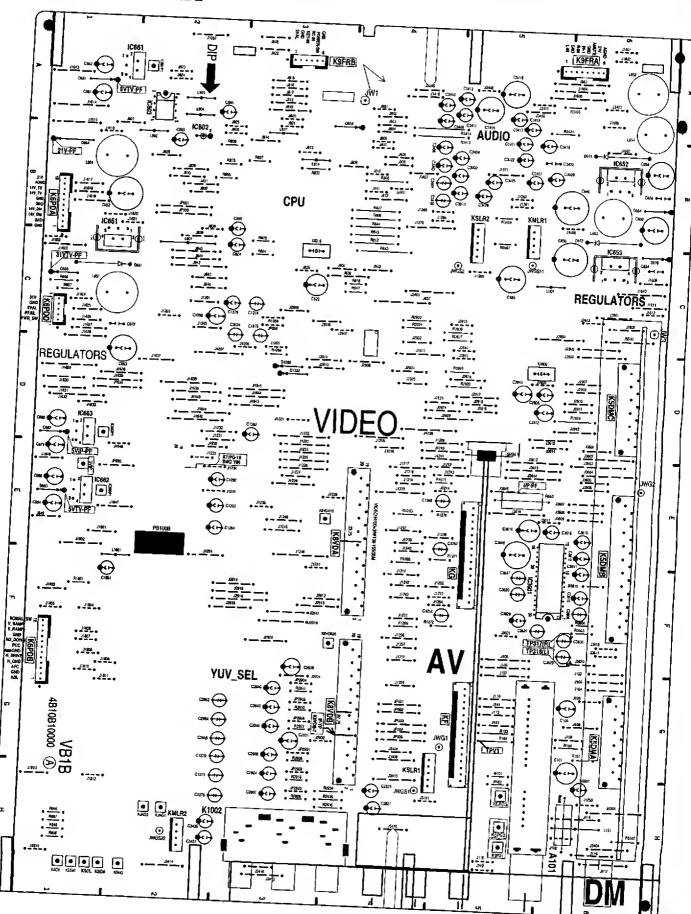
#### **CABINET PARTS LIST**

#### **ACCESSORY PARTS LIST**

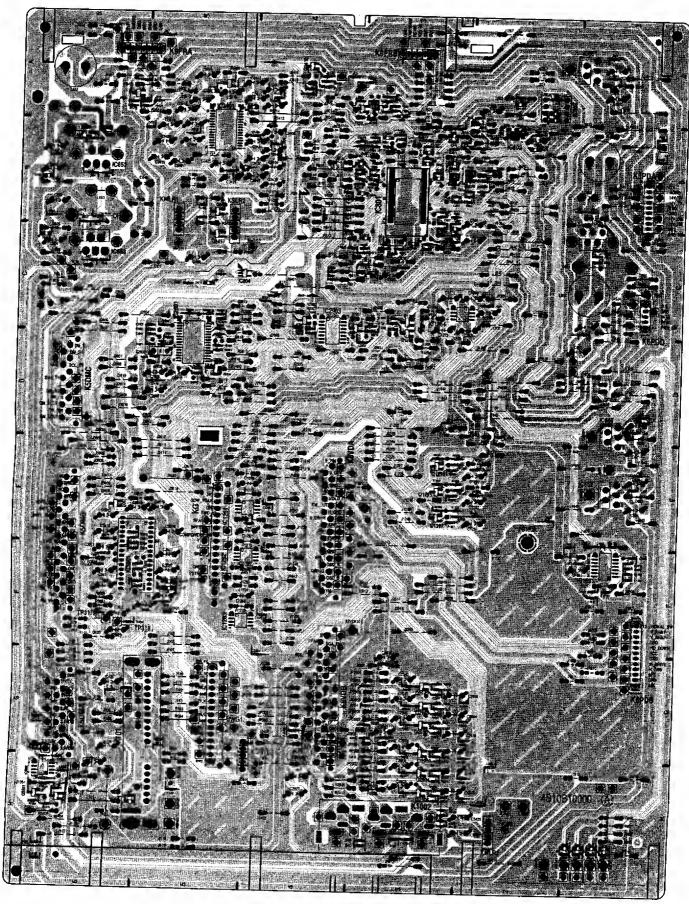
| KEY NO. | PARTS NO.    | DESCRIPTION             | KEY NO. | PARTS NO.    | DESCRIPTION          |
|---------|--------------|-------------------------|---------|--------------|----------------------|
| 1       | 610 311 0103 | CABINET FRONT-H3GLM     |         | 610 312 2304 | OWNER'S MANUAL-H3GLM |
| 2       | 610 268 9648 | CRT MTG WASHER (4 USED) |         | 645 065 6897 | ASSY, REMOCON FXYA   |
| 3       | 412 053 3905 | CRT MTG SCREW (4 USED)  |         | 610 312 0744 | RC-BATTERY LID-FXYA  |
| 4       | 610 311 0127 | CABINET BACK-H3GLM      |         |              |                      |
| 5       | 412 064 4304 | SCREW 4X14 (10 USED)    |         |              |                      |
| 6       | 411 026 2303 | SCREW 3X10 (5 USED)     |         |              |                      |
| 7       | 610 313 2440 | DEC AV SHEET-H3ELM      |         |              |                      |
| 8       | 610 311 6402 | CHASSIS RAIL- (3) G7FAM |         |              |                      |
| 9       | 610 311 9908 | ASSY, BUTTON UNIT-G7FAM |         |              |                      |
| 10      | 610 289 5148 | CAP RC-G8EAM            |         |              |                      |
| 11      | 610 311 9397 | DEC PLATE               |         |              |                      |
| 12      | 645 067 1333 | SANYO BADGE             |         |              |                      |
| 13      | 610 313 4093 | DEC SHEET VIZON         |         |              |                      |
|         |              |                         |         |              |                      |

## COMPONENT AND TESTPOINT LOCATIONS

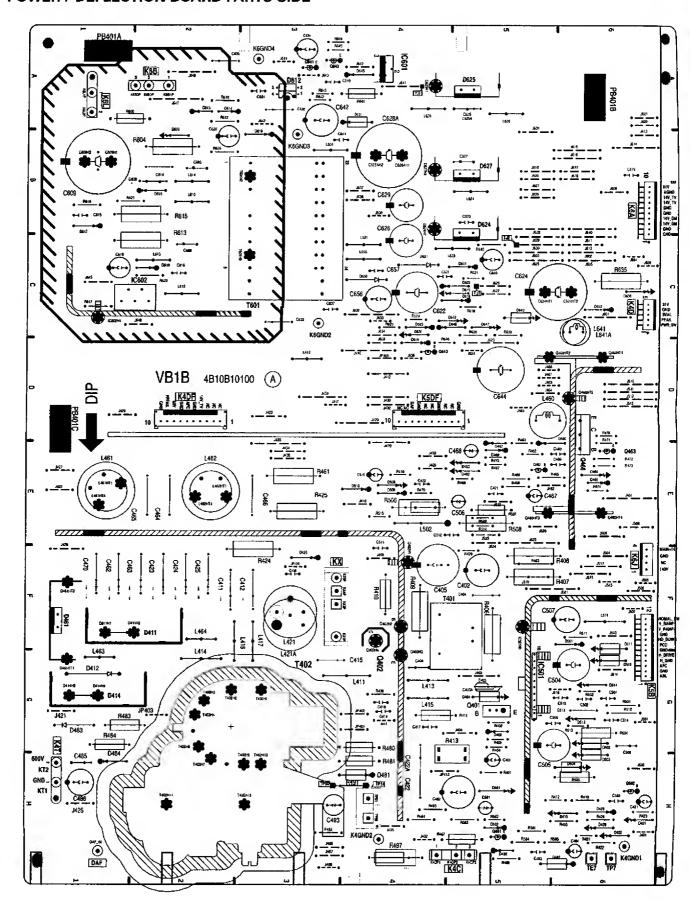
## MAIN BOARD PARTS SIDE



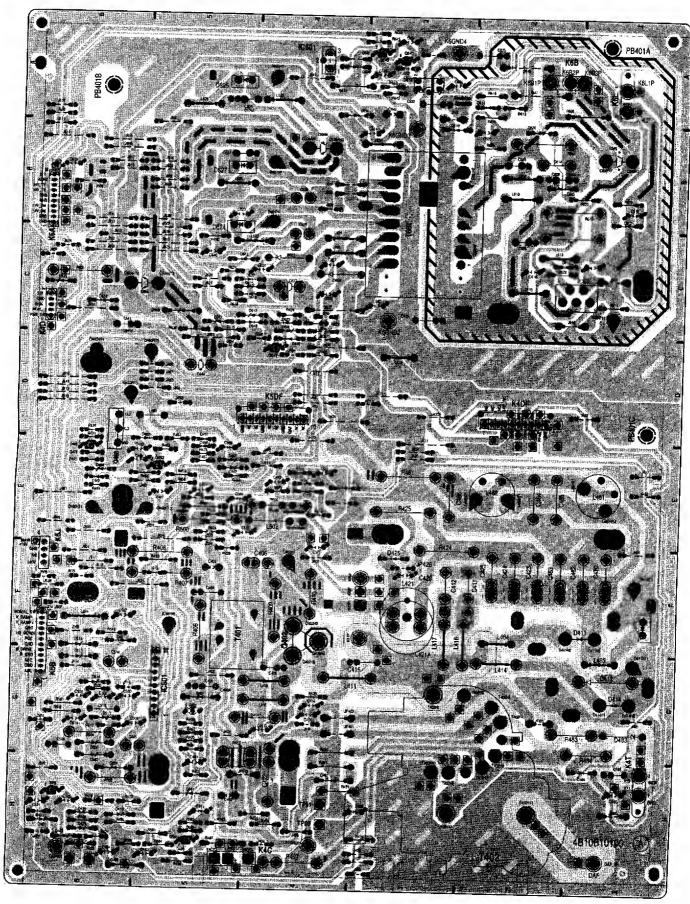
#### MAIN BOARD FOIL SIDE



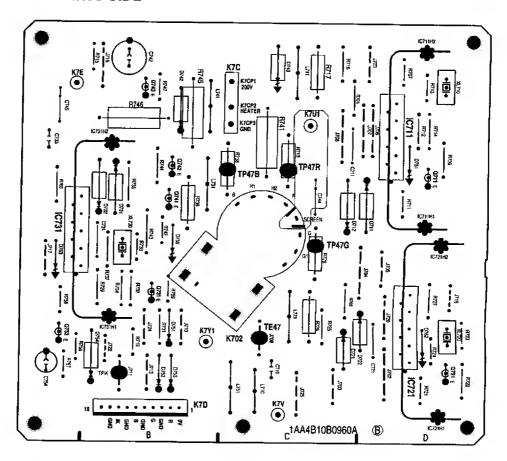
#### **POWER / DEFLECTION BOARD PARTS SIDE**



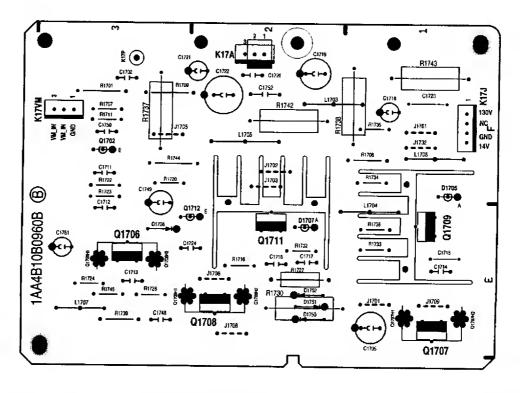
## **POWER / DEFLECTION BOARD FOIL SIDE**

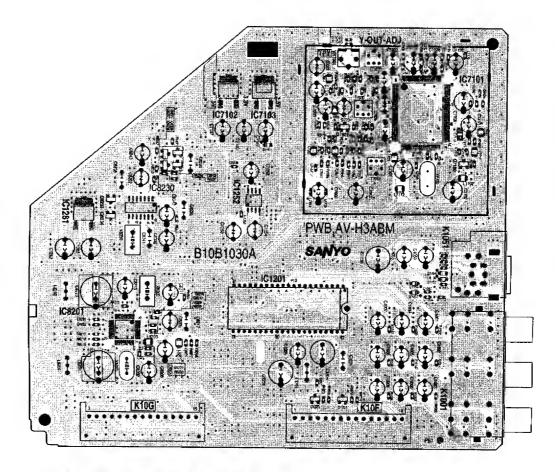


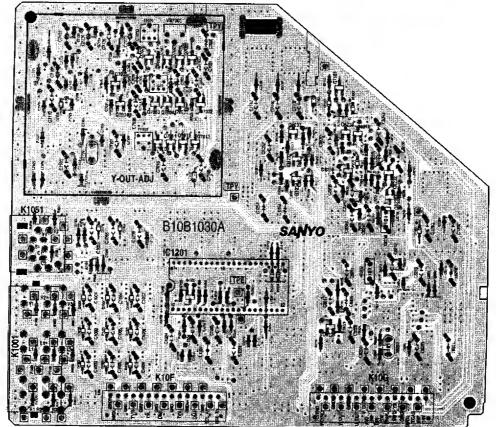
## CRT SOCKET BOARD PARTS SIDE



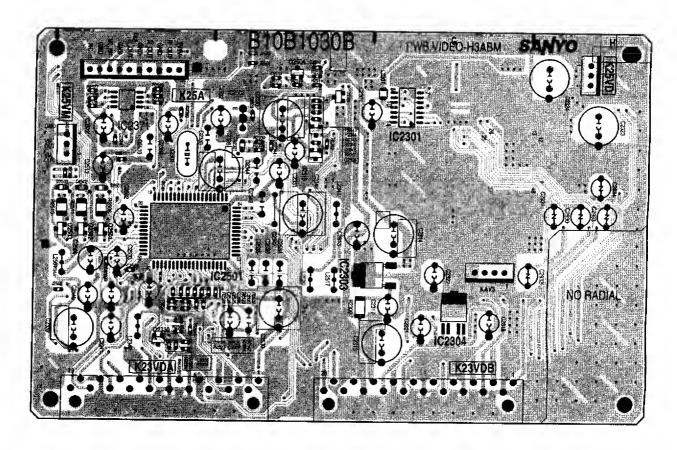
#### VM BOARD PARTS SIDE

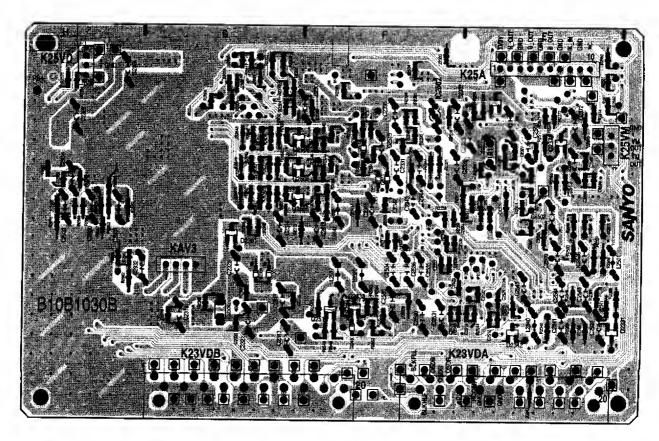




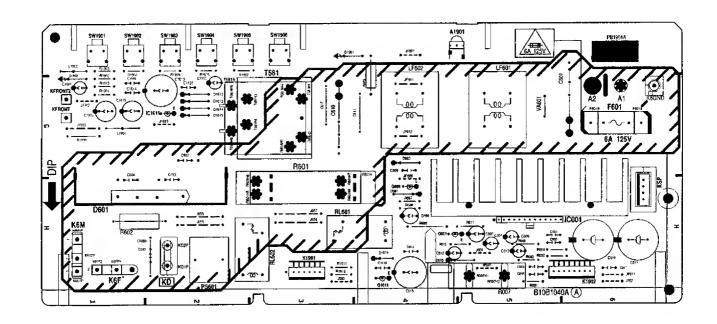


**VIDEO BOARD** 

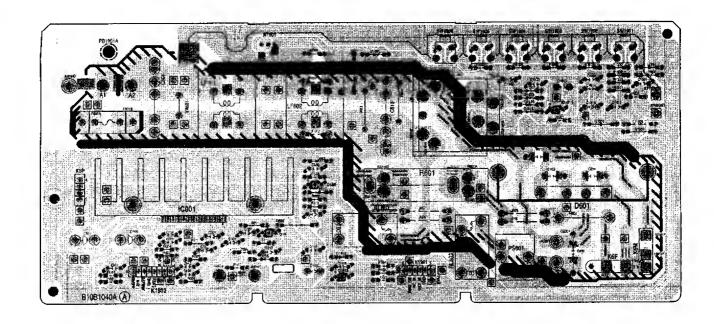




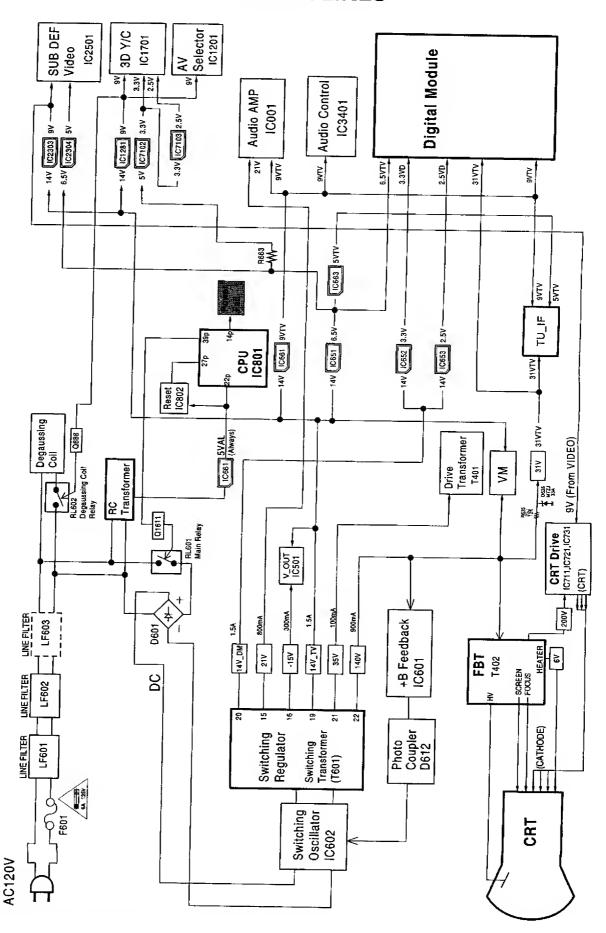
#### FRONT PWB PARTS SIDE



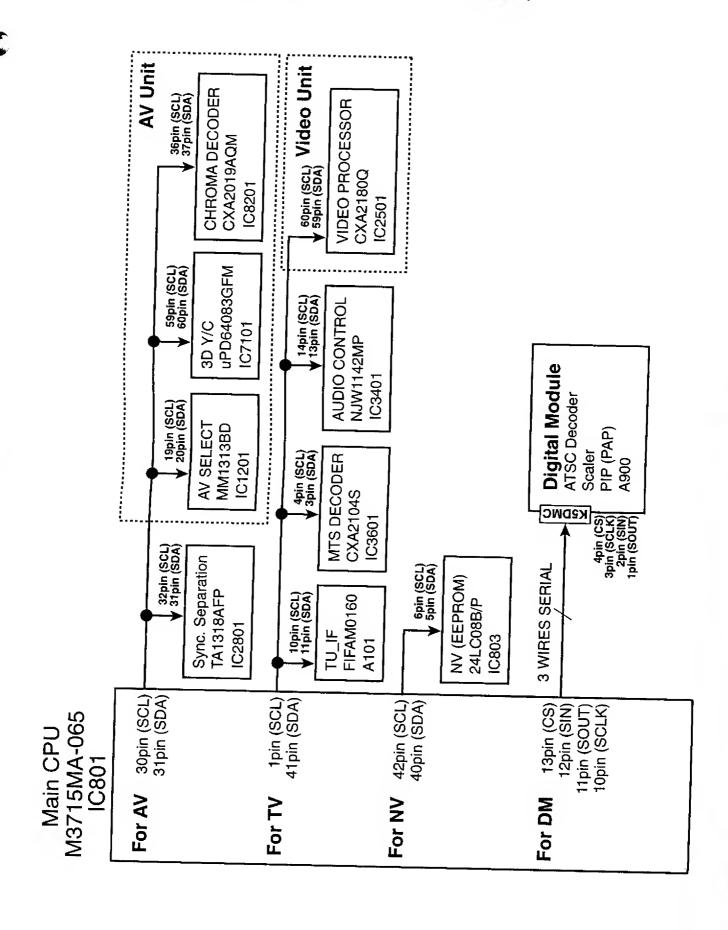
#### **FRONT PWB FOIL SIDE**



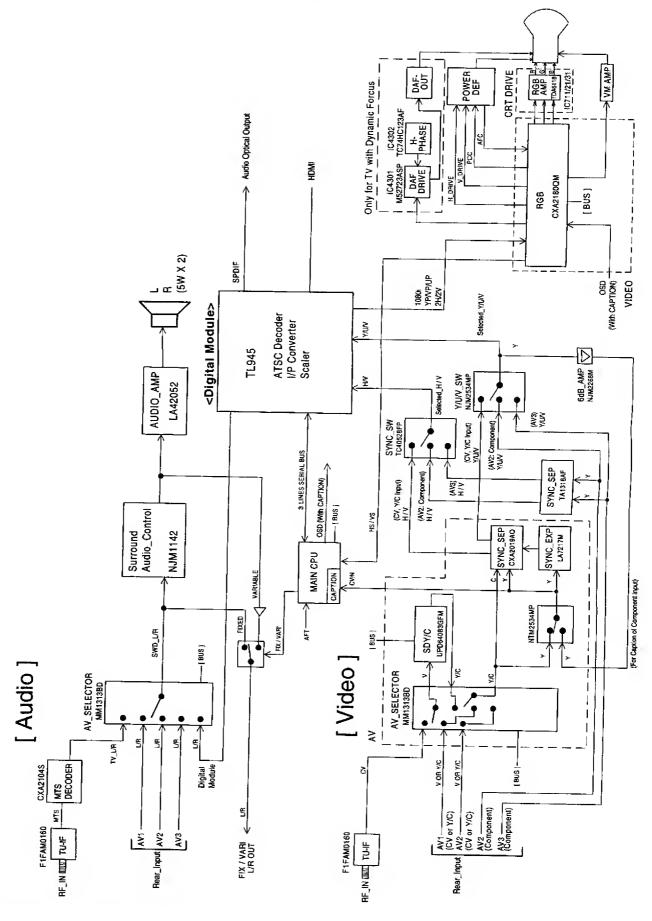
## **POWER LINES**



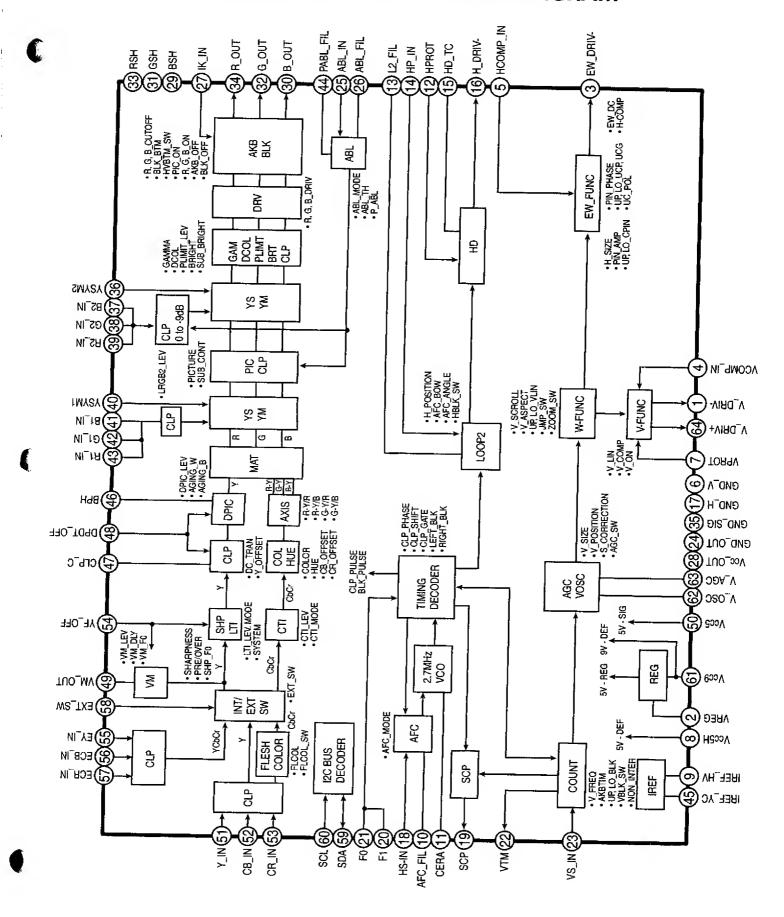
## MAIN CPU DATA BUS LINES



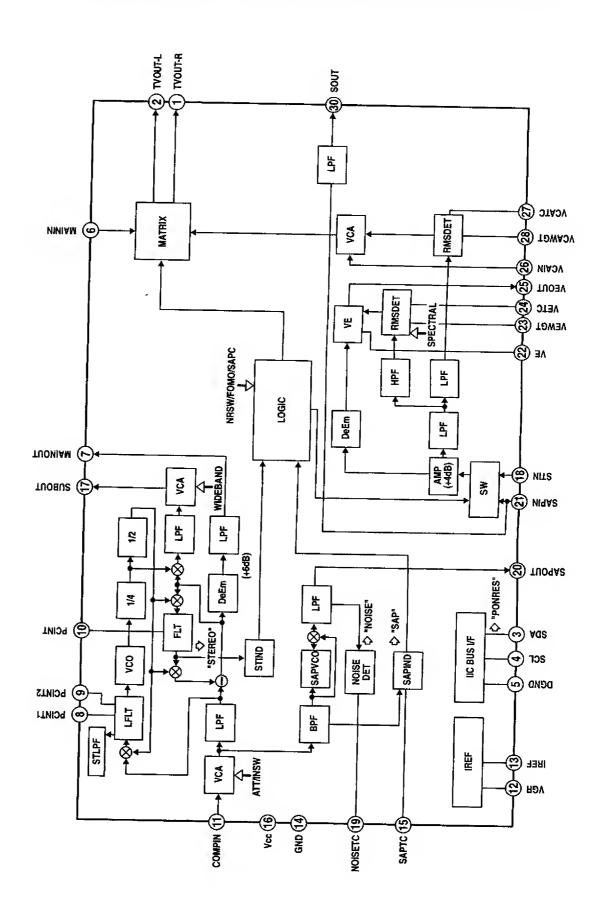
## **SIGNAL LINES**



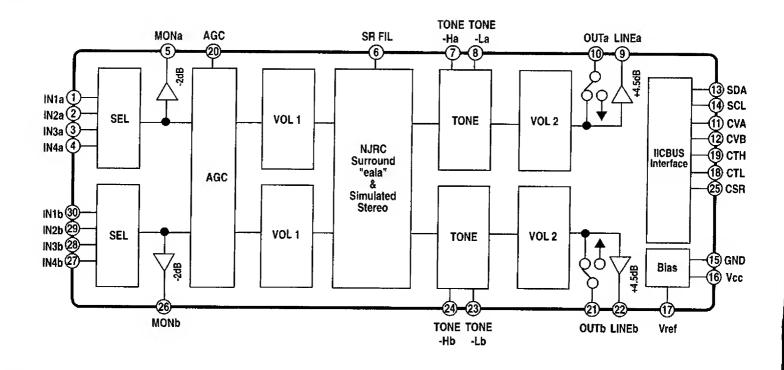
## **IC2501 CRT DRIVER BLOCK DIAGRAM**



## **IC3601 AUDIO PROCESSOR BLOCK DIAGRAM**

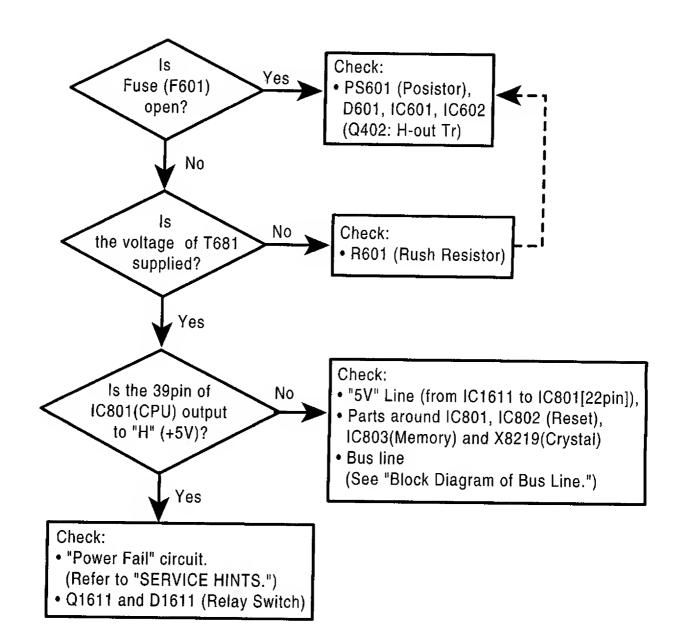


## **IC3401 AUDIO CONTROL BLOCK DIAGRAM**

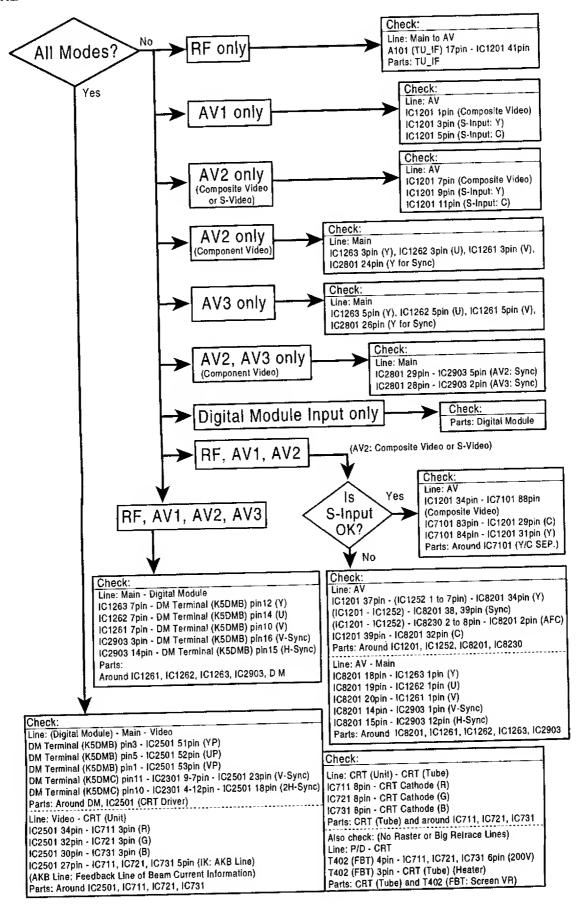


## TROUBLESHOOTING FLOW CHARTS

#### **NO POWER**

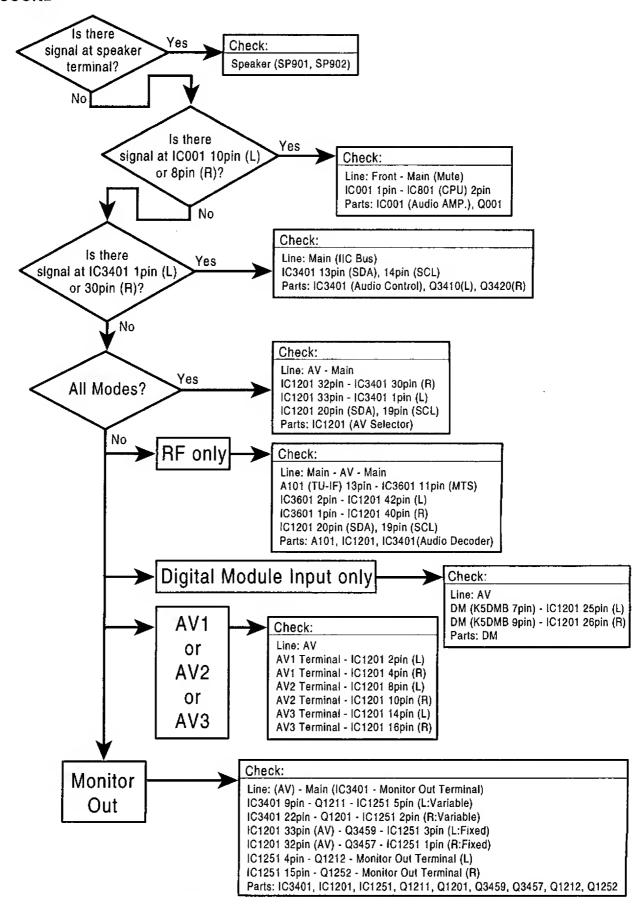


#### **NO PICTURE**



### **TROUBLE SHOOTING FLOW CHARTS (Cont.)**

#### **NO SOUND**



## **CONTROL PORT FUNCTION**

System Control (CPU: IC801)

| em  | Name          | Function 4.           | 1,10 | is describition, and assert the property of the second |
|-----|---------------|-----------------------|------|--|
| 1   | P11/SCL1      | IIC bus clock for TV  | IN   |  |
| 2   | P00           | Audio AMP Mute        | OUT  | Active : High  |
| 3   | P01           | DM Reset Out          | OUT  | Reset Out : Low  |
| 4   | P02           | BPF-SW                | OUT  | Active : High  |
| 5   | P03/AD1       | Key In                | IN   |  |
| 6   | P04/PWM4/AD2  | AV SW 2               | IN   | Active : High  |
| 7   | P05/AD3       | AFT S-IN              | IN   | S-Curve Input (AFT) to Tuner                           |
| 8   | P06/INT2/AD4  | ABL In                | IN   | Active : Low (SDTV only)                               |
| 9   | P07/INT1      | RC In                 | IN   |  |
| 10  | P20/SCLK//AD5 | SCLK for DM           | OUT  |  |
| 11  | P21/SOUT/AD6  | SOUT for DM           | OUT  |  |
| 12  | P22/SIN/AD7   | SIN for DM            | IN   |  |
| 13  | P23/TIM3      | CS for DM             | OUT  |  |
| 14  | P24/TIM2      | Power Fail In         | IN   | Active : Low   |
| 15  | P25/INT3      | Normal SW             | IN   | Active : High (SDTV only)                              |
| 16  | P26/XCIN      | Status In             | IN   | IIC bus control for factory, Bus Release Request : Low |
| 17  | P27/XCOUT     | Ack Out               | OUT  | IIC bus control for factory, Bus Release Request : Low |
| 18  | CNVss         | CNVss                 | -    |  |
| 19  | Xin           | Xin                   | IN   | CPU System Clock (8MHz)                                |
| 20  | Xout          | Xout                  | OUT  | CPU System Clock (8MHz)                                |
| 21  | Vss           | Vss                   | IN   | GND (0Vdc)   |
| 22  | Vcc           | Vcc                   | IN   | +5Vdc±10%  |
| 23  | FILT          | Filter for IC         | IN   | Capacitor must be connected to Vss.                    |
| 24  | HLF           | HLF Out               | OUT  | For Caption RC - Filter                                |
| 25  | Vhold         | Vhold                 | OUT  | For Caption  |
| 26  | Cvin          | CV In                 | IN   | For Caption  |
| 27  | RESET         | Reset In              | IN   | Reset Input (From H to L)                              |
| 28  | Pullup        | Pullup                | IN   | For UOC (10kΩ)   |
| 29  | P15           | AW SW 1               | OUT  | Active : High  |
| 30_ | P31/SCL3      | IIC bus clock for AV  | IN   | (HDTV only)  |
| 31_ | P30/SDA3      | IIC bus data for AV   | OUT  | (HDTV only)  |
| 32_ | CLK/cont/P10  | Fix/Variable Out      | OUT  | Fix : Low, Variable : High                             |
| 33_ | P55/OUT       | OSD BLK Out           | OUT  | OSD Blanking Output (Negative Polarization)            |
| 34  | P54/R         | OSD R Out             | OUT  | OSD R Output (Negative Polarization)                   |
| 35  | P53/G         | OSD G Out             | OUT  | OSD G Output (Negative Polarization)                   |
| 36  | P52/B         | OSD B Out             | OUT  | OSD B Output (Negative Polarization)                   |
| 37  | P51/Vsync     | Vsync                 | IN   | V-SYNC Input (Negative Polarization)                   |
| 38  | P50/Hsync     | Hsync                 | IN   | H-SYNC Input (Negative Polarization)                   |
| 39  | P16/AD8/TIM2  | TV Relay Out          | OUT  | Active: High   |
| 40  | P14/SDA2      | IIC bus data for NVL  | OUT  |  |
| 41  | P13/SDA1      | IIC bus data for TV   | QUT  |  |
| 42  | P22           | IIC bus clock for NVL | IN   |  |

For parts or service contact

SANYO Fisher Service Corporation 21605 Plummer Street Chatsworth, CA 91311 (U.S.A.) 300 Applewood Crescent, Concord, Ontario L4K 5C7 (CANADA)

March / 2004 / 2000 SMC

# NOTE:

The official *Service Manual* includes two oversized (approximately 24" x 30") double-sided diagrams which are not included in this PDF.

This PDF was made from scanning the original *Service Manual* which was obtained from:

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E-mail: <u>support@sanyotv.com</u> Phone: 870-633-5030 Fax: 870-633-0650

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